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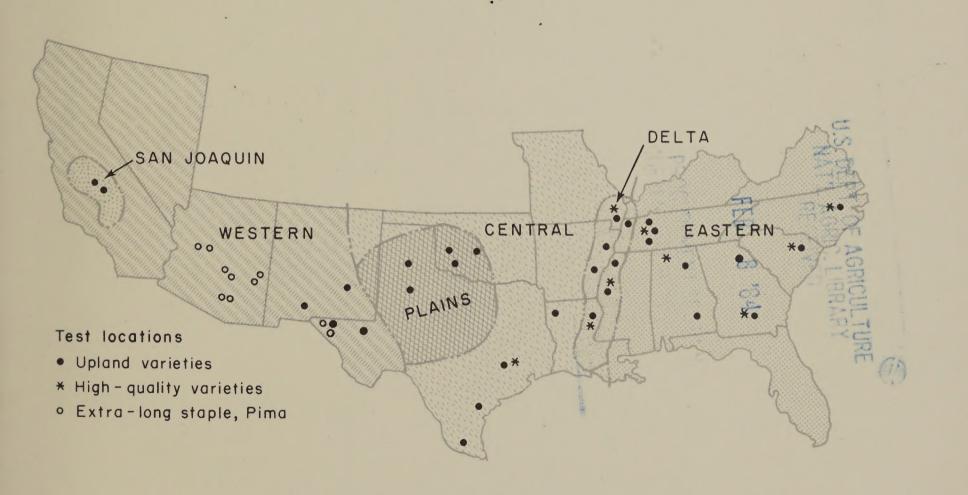
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# Regional Cotton Variety Tests, 1980

Yield, Boll, Seed, Spinning, and Fiber Data



Agricultural Research Service U.S. Department of Agriculture



# REGIONAL COTTON VARIETY TESTS, 1980

Yield, Boll, Seed, Spinning, and Fiber Data

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Agricultural Research Service U. S. Department of Agriculture The Regional Cotton Variety Test series is available free of charge from the Cotton Quality Research Unit, Southern Regional Research Center, P.O. Box 19687, New Orleans, La. 70179.

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# INTRODUCTION

The National Cotton Variety Testing Program, developed from recommendations of the Joint Cotton Breeding Policy Committee, is a system for uniform reporting of data from cotton-yield trials across the U.S. Cotton Belt. The trials are conducted annually at selected locations involved in the variety-testing programs of the cooperating State agricultural experiment stations. The National Cotton Variety Testing Committee is responsible for coordinating program plans from year to year.

National standard varieties are chosen for a 3-year cycle of testing. For the seventh 3-year cycle of testing, which began in 1978, the national standards were Acala SJ-5, Coker 310, Paymaster 303, and Stoneville 213. Within each region, cooperators annually select a group of regional standard varieties that are common to all tests within the region for the particular year. Each station may add entries of local interest, but only data on the national and regional standards are included in this report. All varieties are grown to obtain experimental data, and the designation of national and regional standards is not an endorsement of these varieties by the U.S. Department of Agriculture or the cooperating State agricultural experiment stations.

Plot size, cultural practices, number of entries, and sampling methods are left to the discretion of the participating stations. While these details are not rigidly standardized, all tests are conducted by experienced personnel using sound experimental designs and procedures.

Yield, boll size, lint percentage, and seed index were supplied by the cooperating stations. Fiber and yarn tests were made at USDA's Cotton Laboratory at Clemson, S.C. Seed were analyzed at USDA's Cotton Quality Research Unit, New Orleans, except for the chemical analyses, which were done by a private laboratory. Yield, boll size, and seed index were not received from certain locations. Fiber samples were not received from three locations. Seed samples were not obtained from several locations, and seed samples from some locations were too small for all determinations. All data were assembled in the Cotton Quality Research Unit. The yield and boll data were analyzed at the University of Florida computer center, and the seed, fiber, and yarn data, at Louisiana State University computer center.

In 1980 the National Cotton Variety
Testing Program was organized as shown
on the cover map. Upland varieties were
grown in all six regions. Strains developed in the Southern States with superior
fiber properties and spinning performance
were tested in three contiguous regions
(high-quality test). Extra-long-staple
American Pima varieties were tested in
the Western Region.

# REGIONAL TESTS AND PARTICIPATING STATIONS

Eastern Regional Cotton Variety Test (Upland Varieties)

Alabama Agricultural Experiment Station
Sand Mountain Substation
Georgia Coastal Plain Experiment Station
Georgia College Experiment Station
Pee Dee Experiment Station
Upper Coastal Plain Experiment Station
West Tennessee Agricultural Experiment Station
Ames Plantation
Milan Field Station

Auburn, Ala.
Crossville, Ala.
Tifton, Ga.
Athens, Ga.
Florence, S.C.
Rocky Mount, N.C.
Jackson, Tenn.
Grand Junction, Tenn.
Milan, Tenn.

# Delta Regional Cotton Variety Test (Upland Varieties)

Arkansas Agricultural Experiment Station:

Cotton Branch
Delta Substation

Mississippi Agricultural and Forestry

Experiment Station:

Delta Branch
Off-station test

Missouri Agricultural Experiment Station,

Delta Center

Northeast Louisiana Experiment Station

West Tennessee Agricultural Experiment

Station, off-station test

Marianna, Ark. Clarkedale, Ark.

Stoneville, Miss. Tunica, Miss.

Portageville, Mo. St. Joseph, La.

Ridgely, Tenn.

# Central Regional Cotton Variety Test (Upland Varieties)

Red River Valley Experiment Station

Texas A&M University:

Agricultural Research and Extension Center Agricultural Research Station, off-station test

Texas Agricultural Experiment Station

Bossier City, La.

Weslaco, Tex.

Nueces County, Tex. College Station, Tex.

# Plains Regional Cotton Variety Test (Upland Varieties)

Oklahoma Agricultural Experiment Station:

Cotton Research Station

Irrigation Experiment Station
Sandy Land Research Station

Texas A&M University Agricultural Research

and Extension Center
Off-station test

Chickasha, Okla.
Altus, Okla.
Mangum, Okla.

Lubbock, Tex. Lamesa, Tex.

# Western Regional Cotton Variety Test (Upland Varieties)

New Mexico Agricultural Experiment Station

Southeastern Branch Station

Texas A&M University:

Agricultural Research Center Agricultural Research Station Las Cruces, N. Mex. Artesia, N. Mex.

El Paso, Tex. Pecos, Tex.

# San Joaquin Valley Continuous Cotton Variety Test (Upland Varieties)

California Agricultural Experiment Station:

West Side Field Station Off-station test

Five Points, Calif. Maricopa, Calif.

# High-Quality Regional Cotton Variety Test

Alabama Agricultural Experiment Station,

Tennessee Valley Substation

Georgia Coastal Plain Experiment Station

Mississippi Agricultural and Forestry Experiment

Station, Delta Branch

Belle Mina, Ala. Tifton, Ga.

Stoneville, Miss.

Missouri Agricultural Experiment Station,
Delta Center
Northeast Louisiana Experiment Station
Pee Dee Experiment Station
Texas Agricultural Experiment Station
Upper Coastal Plain Experiment Station
West Tennessee Agricultural Experiment Station

Portageville, Mo. St. Joseph, La. Florence, S.C. College Station, Tex. Rocky Mount, N.C. Jackson, Tenn.

# Pima Regional Cotton Variety Test

Arizona Agricultural Experiment Station:
Cotton Research Center
Off-station tests:

Marana Experimental Farm
Off-station tests, Clark farm
Safford Branch Station, off-station tests:
Curtis farm
Layton farm
Texas A&M University:
Agricultural Research Center
Off-station test, Maros farm

Phoenix, Ariz.
Coolidge, Ariz.
Salome, Ariz.
Wenden, Ariz.
Marana, Ariz.
Marana, Ariz.

Safford, Ariz. Safford, Ariz.

El Paso, Tex. Fabens, Tex.

# Combed-Yarn Test (American Pima Varieties)

American Pima cottons are commonly spun into combed yarns. In addition to the carded yarn tenacity, combed-yarn tests of Pima cotton grown at three locations conducting the Pima Regional Cotton Variety Test were made by the Agricultural Marketing Service, U.S. Department of Agriculture, at its Clemson, S.C., laboratory. Classer's grade and staple, yarn tenacity of 11.8- and 7.4-tex (50's and 80's cotton count) yarns, appearance index, imperfections per 1,000 yards, and waste percentages are reported.

#### TEST RESULTS

No interpretation of the test results other than the indication of the significant differences among means based on an analysis of variance is presented. Means followed by the same letter or letters cannot be considered significantly different at the 0.05 level of probability, as determined by Duncan's multiple-range test. A randomized-block design was used for all analyses, although some tests were planted in lattice designs.

The yield reported for each variety is the average derived from the number of replications used. From three to eight replications were planted, depending on the station, and six replications were more commonly used. Boll size, lint percentage, and seed, fiber, and yarn data are based on two replications of each variety at all locations.

The tables for each regional test are arranged as follows: In the first four to six tables, average data for the entire region are given by cotton variety and location; the entries in these tables are arranged in order of decreasing lint yield. (For some tests, subregional summaries are also included.) Following these tables average data for each location in the region are given, each table being arranged by variety in decreasing order of lint yield.

The column headings and symbols are defined as follows:

Acid-delinted-seed index. The mass of

100 acid-delinted seeds, in grams.

Boll size. The mass, in grams, per boll of seed cotton.

Classer's designation. A description of the quality of cotton in terms of grade and staple according to the official cotton standards of the United States. For grade, classification is based on appearance and is accomplished chiefly through the sense of sight by integration of the three factors of grade—color, leaf, and preparation—in the sample. Classification for staple length involves both sight and touch and is made by pulling out and comparing a typical portion of fiber from a sample with the official staple types.

Colorimeter. These measurements were determined by the Motion Control Cotton Colorimeter. Hunter's b value is a measure of increasing yellowness of the cotton. Rd is the percentage of the reflectance; the higher the value, the lighter the cotton.

Digital Fibrograph. An instrument for measuring fiber length. S.L. (span length) is the distance spanned by a specified percentage of the fibers in the test specimen, where the initial starting point of the scanning in the test is considered 100 percent. The 2.5-percent S.L. is the length, in inches, on the test specimen spanned by 2.5 percent of the fibers scanned at the initial starting point. The 2.5-percent S.L. approximates classer's staple. The 50-percent S.L. is the length, in inches, on the test specimen spanned by 50 percent of the fibers scanned at the initial starting point.

Floaters. The number of acid-delinted seeds that float in water, expressed as a percentage of the number of seeds in the sample. Seeds that float in water are considered immature, and a higher percentage indicates more immaturity.

Free gossypol. The gossypol in fuzzy seeds as determined by AOCS Method Ba 7-58; expressed as a percentage of the mass of the kernel.

High Volume Instrument. An instrument system used to measure length and

strength of cotton fibers. The UHM (upper-half mean) is the average length, in inches, of the half of the fibers, by weight, that contains the longer fibers. Uniformity is the ratio of the mean length to UHM, expressed as a percentage. Tenacity is the fiber strength of a bundle of fibers measured with the two jaws holding the fiber bundle separated by one-eighth inch, expressed in grams force per tex.

Linters. The mass of linters removed in the acid-delinting process, expressed as a percentage of the mass of the fuzzy seeds.

Lint percent. The mass of lint ginned from a sample of seed cotton, expressed as a percentage of the mass of seed cotton.

<u>Lint yield</u>. The mean production of the plots harvested, expressed in pounds of lint per acre.

Micronaire. The fineness of the sample taken from the ginned lint, measured by the Micronaire and expressed in standard (curvilinear scale) micronaire units.

Nitrogen. The nitrogen in fuzzy seeds as determined by AOCS Method Ba 4-38; expressed as a percentage of the mass of the fuzzy seeds. The percentage of nitrogen multiplied by 6.25 is an approximation of the percentage of protein.

Oil. The oil in fuzzy seeds as determined by AOCS Method Aa 4-38; expressed as a percentage of the mass of the fuzzy seeds.

Seed density. The mass per volume of a seed, expressed in grams per cubic centimetre; the specific gravity.

Seed grade. A visual estimate of the amount of linters on seeds. Seeds are graded from 1 to 16; 1=most dense coating, and 16=no linters (completely naked).

Seed index. The mass of 100 fuzzy seeds, in grams.

Seed surface area. The surface area of a seed, in square millimetres; estimated by assuming that a seed is a cone on a

hemispherical base and that the ratio of the diameter to the length is 1:1.755.

Seed volume. The volume of a seed, in cubic millimetres.

Stelometer. An instrument for measuring fiber strength.  $\underline{T}_1$  is the fiber strength of a bundle of fibers measured on the Stelometer with two jaws holding the fiber bundle separated by a 1/8-inch spacer, expressed in millinewtons (mN) per tex.  $\underline{E}_1$  is the percentage elongation at break of the center one-eighth inch of the fiber bundle measured for  $\underline{T}_1$  strength on the Stelometer.

<u>Tex.</u> The linear density of fibers, filaments, and yarns, expressed as the mass, in milligrams, of 1 metre of fiber or yarn.

<u>Waste</u>. The difference in mass, expressed as a percentage, of the fed stock and

delivered stock. <u>Picker and card</u> waste is the loss in mass during opening, picking, and carding. <u>Comber</u> waste is the loss in mass during combing.

Yarn appearance index. The relative evenness, smoothness, and freedom from foreign material of the yarn as evaluated by a visual comparison of the yarn with the standards adopted by the American Society for Testing and Materials. Higher numbers indicate more even and smooth yarns with less foreign material.

Yarn imperfections. The abrupt changes in thickness of a yarn detected by two capacitor plates, expressed as the number of such changes per 1,000 yards of yarn; may be called neps.

Yarn tenacity. The strength of the yarn, in millinewtons per tex (mN/tex).

# EASTERN REGIONAL COTTON VARIETY TEST

Table 1. Eastern test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	714 a	4.94 de	38.7 d	10.3 c	138 e
McNair 235	708 a	4.79 efg	39.6 bc	9.8 d	145 cd
McNair 220	701 ab	4.84 ef	38.7 d	10.4 c	150 c
Stoneville 506	669 bc	4.53 h	38.1 ef	10.6 bc	138 e
Deltapine 61	652 cd	4.97 de	37.7 fg	10.7 bc	146 cd
Coker 315	649 cd	5.12 bcd	39.3 c	10.6 bc	151 c
Deltapine 55	642 cd	4.69 fgh	40.1 Ъ	9.8 d	143 de
Coker 8304	637 cd	5.09 cd	38.6 de	10.6 bc	149 cd
Coker 310	631 cd	5.32 ab	38.3 de	10.6 bc	150 с
Deltapine 41	626 d	4.47 h	41.0 a	9.6 d	151 c
Coker 420	620 d	4.69 fgh	36.9 h	10.4 bc	158 Ъ
Paymaster 303	564 e	5.45 a	37.5 g	10.9 ab	131 f
Ga Cot 79	547 ef	4.59 gh	35.9 i	10.3 c	151 c
Acala SJ-5	513 f	5.22 bc	37.5 fg	11.4 a	182 a

Table 2. Eastern test: Fiber data by cotton variety

Variety	Digital F	ibrograph	Stelon	Stelometer	
	2.5% S.L. (inches)	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(Thenes)	(inches)	(mN/tex)	(percent)	
Stoneville 213	1.07 efg	0.50 def	190 ef	6.3 b	4.94 ab
McNair 235	1.07 fg	.50 ef	196 de	5.3 f	4.64 cd
McNair 220	1.06 g	.49 ef	200 bcde	5.3 f	4.67 cd
Stoneville 506	1.08 def	.50 cdef	191 def	6.0 bc	4.81 bc
Deltapine 61	1.10 cde	.52 bc	201 bcd	7.0 a	5.08 a
Coker 315	1.10 bcd	.51 cde	199 cde	5.6 def	4.77 bc
eltapine 55	1.08 defg	.49 f	185 fg	5.7 cde	4.61 cde
Coker 8304	1.10 cd	.51 cde	197 de	5.4 ef	4.71 cd
Coker 310	1.11 abc	.52 bcd	197 de	5.6 def	4.56 de
Deltapine 41	1.08 def	.50 cdef	196 de	5.6 def	4.81 bc
Coker 420	1.12 a	.54 ab	210 ъ	5.9 cd	4.64 cd
Paymaster 303	1.01 h	.47 g	176 g	5.4 ef	4.44 ef
Ga Cot 79	1.08 def	.51 cdef	208 bc	6.8 a	4.71 cd
Acala SJ-5	1.12 ab	.55 a	244 a	5.7 cde	4.32 f
	Hig	n Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)	α	b value
Stoneville 213	1.10 bcd	82.8 def	24.0 bcde	68.2 a	11.2 ab
IcNair 235	1.09 cd	82.9 cde	23.1 efg	67.4 a	10.8 bcd
IcNair 220	1.09 d	83.1 cde	23.6 bcdef	69.1 a	10.8 bcd
Stoneville 506	1.11 bcd	82.8 def	23.6 cdef	68.9 a	10.3 d
eltapine 61	1.12 bcd	83.8 abc	24.4 bcd	68.5 a	10.7 bcd
Coker 315	1.13 abc	82.7 def	24.5 bc	68.5 a	ll.l abc
	1.10 bcd	82.1 ef	22.6 fg	69.9 a	11.0 abc
Deltapine 55	1.10 DCd				
_	1.12 bcd	83.1 cd	23.1 defg	67.4 a	10.8 bcd
Coker 8304			23.1 defg 24.0 bcde	67.4 a 67.9 a	10.8 bcd 10.7 bcd
Coker 8304	1.12 bcd	83.1 cd	•	67.9 a	
Coker 8304          Coker 310          Deltapine 41	1.12 bcd 1.12 bcd 1.10 bcd	83.1 cd 82.6 def	24.0 bcde	67.9 a	10.7 bcd
Coker 8304 Coker 310 Deltapine 41 Coker 420	1.12 bcd 1.12 bcd 1.10 bcd	83.1 cd 82.6 def 83.4 bcd	24.0 bcde 23.6 bcdef	67.9 a 70.0 a 70.0 a	10.7 bcd 11.4 a
Coker 310 Deltapine 41 Coker 420 Paymaster 303	1.12 bcd 1.12 bcd 1.10 bcd 1.16 a	83.1 cd 82.6 def 83.4 bcd 84.2 ab	24.0 bcde 23.6 bcdef 24.9 b 22.1 g	67.9 a 70.0 a 70.0 a	10.7 bcd 11.4 a 10.6 cd

Table 3. Eastern test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Change 11 o 212	16.1 e	3.49 d	0.60 bcd	13.4 a	4.0 f
Stoneville 213 McNair 235	18.1 b	3.60 c	.61 bcd	11.2 cd	5.2 ab
McNair 220	18.0 b	3.60 c	.58 bcd	10.7 cde	5.1 abc
Stoneville 506	17.3 c	3.57 c	.55 cde	11.5 bcd	5.0 bcd
Deltapine 61	18.2 b	3.53 cd	.60 ·bcd	10.7 cde	5.5 a
Coker 315	18.2 b	3.67 b	.64 b	11.3 cd	4.6 e
Deltapine 55	16.8 d	3.58 c	.61 bcd	10.1 de	5.3 ab
Coker 8304	18.3 b	3.69 b	.62 bc	11.3 cd	4.8 cde
Coker 310	18.1 b	3.68 b	.64 b	11.3 cd	4.5 e
Deltapine 41	16.8 d	3.66 b	.60 bcd	9.3 e	5.1 bcd
Coker 420	18.9 a	3.70 ab	.86 a	12.9 ab	3.8 f
Paymaster 303	18.3 b	3.59 c	.56 cde	11.9 bc	4.7 de
Ga Cot 79	17.3 c	3.42 e	.55 de	10.9 cd	5.5 a
Acala SJ-5	18.4 ъ	3.75 a	.51 e	10.1 de	3.9 f
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Stoneville 213	94.2 cd	108.5 cd	0.962 g	3.0 ab	8.8 cd
McNair 235	90.5 ef	106.2 def	.984 def	2.9 abc	8.9 cd
McNair 220	94.3 cd	108.6 cd	.973 fg	2.0 bc	9.1 bcd
Stoneville 506	95.9 c	109.7 c	.972 fg	3.5 a	9.2 bcd
Deltapine 61	93.7 cde	108.1 cde	.991 cd	2.3 abc	9.3 bcd
Coker 315	93.0 cdef	107.5 cdef	1.017 ab	2.3 bc	9.4 bcd
Deltapine 55	90.8 ef	105.7 ef	.972 fg	2.0 bc	8.8 d
Coker 8304	93.3 cde	107.8 cdef	_	2.1 bc	9.4 bcd
Coker 310	94.9 cd	109.0 c	1.011 b	2.3 abc	9.5 bc
Deltapine 41	86.5 g	102.5 g	.973 fg	2.5 abc	9.1 bcd
Coker 420	90.0 f	•	1.027 a	1.7 c	9.3 bcd
Paymaster 303	99.3 ь	112.2 b	.978 ef	3.0 ab	9.7 ь
Ga Cot 79	92.4 def	107.0 cdef	.996 c	2.4 abc	9.1 bcd
04 006 //					

Table 4. Eastern test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/ tex)
Florence, S. C	1208 a	6.11 a	41.3 a	10.4 c	132 с
Tifton, Ga Ames Plantation,	686 b	5.21 b	40.4 b	10.3 c	144 b
Tenn	660 Ъ	4.78 c	37.5 c	11.4 a	157 a
Jackson, Tenn	623 Ъ	4.96 bc	32.3 e	11.1 b	167 a
Milan, Tenn	558 c	4.71 cd	35.5 d	11.0 b	166 a
Crossville, Ala	504 cd	4.24 de	41.6 a	8.6 e	NA
Rocky Mt., N. C	483 d	5.00 bc	39.9 Ъ	9.3 d	143 Ъ
Auburn, Ala	168 e	3.92 e	40.3 b	NA	131 c

NA, Data not available.

Table 5. Eastern test: Fiber data by test location

	ibrograph		meter	Micronaire
2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
1.04 d	0.49 cd	198 b	6.4 a	5.45 a
1.06 c	•50 c	199 в	5.4 c	5.15 b
1.14 b	•54 a	204 Ъ	5.9 Ъ	4.62 d
1.18 a	•55 a	222 a	6.0 b	4.02 f
1.14 b	•52 Ъ	205 Ъ	5.5 c	4.21 e
NA	NA	NA	NA	NA
1.02 e	.48 d	188 c	6.4 a	4.62 d
1.01 e	•45 e	179 с	5.3 c	4.79 c
High	h Volume Instru	ment	Color	rimeter
UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
(inches)	(percent)	(g/tex)		b value
1.04 d	82.2 c	23.7 hc	68.9 h	9.4 e
1.08 c	83.5 b	24.2 bc	64.8 c	9.4 e
1.17 b	84.5 a	24.7 b	68.3 b	11.8 c
	83.8 ab	26.0 a	71.8 a	12.7 b
1.18 b	83.6 b	24.4 bc	71.6 a	13.1 a
NA	NA	NA	NA	NA
	000	00 0 1	(0 0 1	
1.02 e	82.2 c	23.3 cd	69.2 b	9.9 d
	1.04 d 1.06 c 1.14 b 1.18 a 1.14 b NA 1.02 e 1.01 e Hig UHM (inches)	1.04 d	(inches)       (inches)       (mN/tex)         1.04 d       0.49 cd       198 b         1.06 c       .50 c       199 b         1.14 b       .54 a       204 b         1.18 a       .55 a       222 a         1.14 b       .52 b       205 b         NA       NA       NA         1.02 e       .48 d       188 c         1.01 e       .45 e       179 c         High Volume Instrument         UHM       Uniformity Tenacity (g/tex)         (inches)       (percent)       (g/tex)         1.04 d       82.2 c       23.7 bc         1.08 c       83.5 b       24.2 bc         1.17 b       84.5 a       24.7 b         1.22 a       83.8 ab       26.0 a         1.18 b       83.6 b       24.4 bc	(inches)       (mN/ tex)       (percent)         1.04 d       0.49 cd       198 b       6.4 a         1.06 c       .50 c       199 b       5.4 c         1.14 b       .54 a       204 b       5.9 b         1.18 a       .55 a       222 a       6.0 b         1.14 b       .52 b       205 b       5.5 c         NA       NA       NA       NA         1.02 e       .48 d       188 c       6.4 a         1.01 e       .45 e       179 c       5.3 c         High Volume Instrument       Colog         WHM       Uniformity       Tenacity       Rd         (inches)       (percent)       (g/ tex)         1.04 d       82.2 c       23.7 bc       68.9 b         1.08 c       83.5 b       24.2 bc       64.8 c         1.17 b       84.5 a       24.7 b       68.3 b         1.22 a       83.8 ab       26.0 a       71.8 a         1.18 b       83.6 b       24.4 bc       71.6 a

NA, Data not available.

Table 6. Eastern test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Florence, S. C	18.7 a	3.69 b	0.83 a	12.1 b	4.6 c
Tifton, Ga Ames Plantation,	18.1 b	3.56 d	.60 c	12.1 b	6.2 a
Tenn	17.5 c	3.47 e	•64 Ъ	11.3 bc	4.0 d
Jackson, Tenn	16.6 e	3.62 c	•53 d	9.8 de	4.2 d
Milan, Tenn	16.9 d	3.61 cd	•52 d	9.2 e	4.1 d
Crossville, Ala	NA	NA	NA	NA	NA
Rocky Mt., N. C	18.2 b	3.85 a	•60 c	10.7 cd	5.2 b
Auburn, Ala	NA	NA	NA	NA	NA
Athens, Ga	18.3 b	3.47 e	•53 d	13.1 a	5.3 b
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Florence, S. C	87.5 d	103.4 d	1.056 a	1.1 e	9.2 c
Tifton, Ga Ames Plantation,	92.0 c	106.9 d	1.035 b	1.7 de	9.5 bc
Tenn	103.0 ь	115.3 b	•939 c	3.4 b	10.0 a
Jackson, Tenn	109.2 a	120.0 a	•904 e	4.8 a	9.8 ab
Milan, Tenn	103.2 b	115.7 b	.916 d	2.5 c	9.5 bc
Crossville, Ala	NA	NA	NA	NA	NA
Rocky Mt., N. C	83.5 e	100.2 e	1.040 ь	2.2 cd	8.7 d
Auburn, Ala	NA	NA	NA	NA	NA
•	78.6 f	96.1 f	1.042 ь	1.7 de	8.2 e

NA, Data not available.

Table 7. Eastern test: Yield, boll and yarn tenacity data for Florence, S.C.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	1385 a	5.93	40.6	10.3	138
Coker 315	1344 ab	6.58	41.8	10.7	132
McNair 235	1324 abc	5.83	41.9	10.1	137
Deltapine 61	1318 abc	6.13	41.6	9.9	125
Stoneville 213	1309 abc	5.99	41.9	10.1	118
Coker 420	1294 abc	5.55	49.7	10.4	140
Coker 8304	1285 abc	6.16	41.2	10.5	129
Stoneville 506	1258 abcd	5.51	41.8	10.4	119
Coker 310	1226 abcd	6.84	40.8	10.7	138
Deltapine 55	1173 bcd	6.08	43.6	9.3	126
Ga Cot 79	1150 cd	6.63	39.3	10.1	135
Deltapine 41	1090 d	5.33	44.5	9.7	134
Paymaster 303	911 e	6.62	40.3	11.3	118
Acala SJ-5	840 e	6.67	39.1	12.2	164

Table 8. Eastern test: Fiber data for Florence, S.C.

ariety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
cNair 220	1.02	0.48	217	5.9	5.45
oker 315	1.04	•50	194	6.0	5.40
cNair 235	1.04	.49	202	5.6	5.35
eltapine 61	1.02	.49	204	7.7	5.90
toneville 213	1.01	•48	184	7.2	5.80
oker 420	1.05	•50	204	6.4	5.35
oker 8304	1.05	•50	191	6.2	5.45
toneville 506	1.03	•50	184	6.7	5.65
oker 310	1.05	•50	190	5.9	5.25
eltapine 55	1.02	•48	187	6.0	5.60
a Cot 79	1.04	• 50	213	6.9	5.40
eltapine 41	1.03	.48	205	6.0	5.65
aymaster 303	1.00	• 46	169	6.3	5.15
cala SJ-5	1.10	•54	231	6.4	4.90
	Hig	h Volume Instru	ment	Colo	rimeter
	Hig UHM	h Volume Instru Uniformity	Tenacity	$\frac{Color}{R_d}$	rimeter Hunter's
cNair 220	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	70.5	Hunter's b value
oker 315	UHM (inches) 1.01 1.07	Uniformity (percent)  81.0 82.0	Tenacity (g/tex)  24.5 23.0	70.5 68.5	Hunter's b value  9.3 9.8
oker 315 cNair 235	UHM (inches) 1.01 1.07 1.08	Uniformity (percent)  81.0 82.0 82.5	Tenacity (g/tex) 24.5 23.0 23.5	70.5 68.5 64.0	Hunter's b value  9.3 9.8 9.9
oker 315 cNair 235 eltapine 61	1.01 1.07 1.08 1.02	Uniformity (percent) 81.0 82.0 82.5 82.5	Tenacity (g/tex) 24.5 23.0 23.5 22.5	70.5 68.5 64.0 70.5	Hunter's b value  9.3 9.8 9.9 9.0
oker 315 cNair 235 eltapine 61 toneville 213	UHM (inches) 1.01 1.07 1.08 1.02 1.04	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5	70.5 68.5 64.0 70.5 69.8	Hunter's b value  9.3 9.8 9.9 9.0 9.2
cher 315	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0	70.5 68.5 64.0 70.5 69.8 68.2	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9
oker 315 cNair 235 eltapine 61 toneville 213 oker 420 oker 8304	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06 1.02	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0 82.0	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0 21.5	70.5 68.5 64.0 70.5 69.8 68.2 69.2	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9 9.3
oker 315	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06 1.02 1.02	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0 82.0	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0 21.5 22.0	70.5 68.5 64.0 70.5 69.8 68.2 69.2 68.5	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9 9.3 9.2
cNair 220 oker 315 cNair 235 eltapine 61 toneville 213 oker 420 oker 8304 toneville 506 oker 310	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06 1.02 1.02	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0 82.0 82.0 81.5	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0 21.5 22.0 26.5	70.5 68.5 64.0 70.5 69.8 68.2 69.2 68.5 68.8	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9 9.3 9.2 9.6
oker 315	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06 1.02 1.02 1.02 1.02	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0 82.0 81.5 81.5	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0 21.5 22.0 26.5 21.0	70.5 68.5 64.0 70.5 69.8 68.2 69.2 68.5 68.8	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9 9.3 9.2 9.6 9.6
oker 315	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06 1.02 1.02 1.06 1.02 1.06	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0 82.0 81.5 81.5	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0 21.5 22.0 26.5	70.5 68.5 64.0 70.5 69.8 68.2 69.2 68.5 68.8 68.5 70.8	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9 9.3 9.2 9.6
oker 315	UHM (inches) 1.01 1.07 1.08 1.02 1.04 1.06 1.02 1.02 1.02 1.02	Uniformity (percent) 81.0 82.0 82.5 82.5 83.0 84.0 82.0 81.5 81.5	Tenacity (g/tex) 24.5 23.0 23.5 22.5 22.5 24.0 21.5 22.0 26.5 21.0 25.0	70.5 68.5 64.0 70.5 69.8 68.2 69.2 68.5 68.8	Hunter's b value  9.3 9.8 9.9 9.0 9.2 8.9 9.3 9.2 9.6 9.6 9.6

Table 9. Eastern test: Seed data for Florence, S.C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220	19.1	3.61	0.77	12.0	5.0
Coker 315	18.8	3.74	.83	13.0	4.0
McNair 235	18.8	3.60	.94	11.8	5.0
Deltapine 61	19.4	3.60	•90	11.6	6.0
Stoneville 213	17.6	3.73	.83	13.8	4.0
Coker 420	19.0	3.69	1.04	15.9	3.0
Coker 8304	18.6	3.78	.80	12.6	4.5
Stoneville 506	18.7	3.67	• 84	11.2	5.0
Coker 310	18.7	3.73	.75	11.7	4.0
Deltapine 55	18.1	3.73	.89	10.1	5.0
Ga Cot 79	18.7	3.54	.86	11.6	5.5
Deltapine 41	18.8	3.71	•92	9.8	5.5
Paymaster 303	18.9	3.66	.68	12.1	4.5
Acala SJ-5	19.0	3.83	. 64	11.6	3.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm²)	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
McNair 220	90.1	105.5	1.040	0.8	9.4
Coker 315	88.5	104.2	1.063	1.0	9.4
McNair 235	85.9	102.1	1.050	1.6	10.2
Deltapine 61	85.7	102.0	1.056	•5	9.4
Stoneville 213	88.1	103.9	1.032	.6	9.0
Coker 420	80.1	97.6	1.097	.3	8.8
Coker 8304	85.0	101.5	1.065	2.3	9.3
Stoneville 506	87.2	103.2	1.074	1.0	9.4
Coker 310	89.2	104.7	1.062	1.3	9.5
Deltapine 55	78.8	96.4	1.063	•0	8.4
Ga Cot 79	86.2	102.4	1.057	•5	9.1
Deltapine 41	80.1	97.5	1.066	.9	8.5
Paymaster 303	97.4	111.1	1.017	3.8	9.9

Table 10. Eastern test: Yield, boll and yarn tenacity data for Tifton, Ga.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
	702	<i>r</i> 0.7	/1 1	10 /	120
Stoneville 213	793 a	5.27	41.1	10.4	132
Deltapine 41	772 ab	4.65	43.5	9.1	146
Stoneville 506	760 ab	4.64	39.7	10.4	140
Deltapine 61	741 ab	5.04	40.0	10.2	132
Deltapine 55	739 ab	5.08	42.1	9.8	145
McNair 220	713 ab	5.33	39.0	10.1	146
Coker 315	712 ab	5.48	42.5	10.0	146
Coker 310	681 ab	5.76	39.6	10.8	138
Coker 8304	659 ab	5.73	41.4	11.2	142
Coker 420	658 ab	5.10	39.2	9.8	148
McNair 235	655 ab	4.93	40.8	9.6	146
Ga Cot 79	628 abc	4.92	39.4	9.5	146
Paymaster 303	616 bc	5.78	38.0	11.3	126
Acala SJ-5	482 c	5.23	39.8	11.5	182

Table 11. Eastern test: Fiber data for Tifton, Ga.

ariety	Digital F			meter	Micronair
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub>	E <sub>1</sub> (percent)	reading
	(Theres)	(Theries)	(mN/tex)	(percent)	
coneville 213	1.06	0.52	173	5.6	5.25
eltapine 41	1.06	. 49	201	5.6	5.30
oneville 506	1.08	.50	195	6.0	5.30
eltapine 61	1.08	•52	198	7.0	5.50
eltapine 55	1.04	.48	188	5.4	5.20
Nair 220	1.03	.51	206	4.9	5.10
oker 315	1.10	•53	204	4.8	5.15
oker 310	1.10	.50	194	5.2	5.10
ker 8304	1.10	•54	198	4.6	5.30
ker 420	1.10	•54	220	5.4	5.15
Nair 235	1.02	.49	197	5.2	5.15
Cot 79	1.01	.48	198	6.0	5.35
ymaster 303	.96	.44	178	4.9	4.75
ala SJ-5	1.10	• 54	239	5.2	4.55
	Hio	h Volume Instru	ment	Color	rimeter
		h Volume Instru Uniformity			rimeter Hunter's
	UHM (inches)	h Volume Instru Uniformity (percent)	Tenacity (g/tex)	$\frac{Color}{R_d}$	Hunter's  b value
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	70.2	Hunter's b value
ltapine 41	UHM (inches) 1.10 1.10	Uniformity (percent)  83.5 83.5	Tenacity (g/tex) 24.0 24.5	70.2 67.5	Hunter's b value  10.1 10.2
oneville 506	UHM (inches) 1.10 1.10 1.10	Uniformity (percent) 83.5 83.5 83.5	Tenacity (g/tex) 24.0 24.5 24.5	70.2 67.5 65.8	Hunter's b value  10.1 10.2 8.4
eltapine 41 coneville 506 eltapine 61	UHM (inches) 1.10 1.10 1.10 1.09	Uniformity (percent) 83.5 83.5 83.5 84.0	Tenacity (g/tex) 24.0 24.5 24.5 24.5	70.2 67.5 65.8 61.0	Hunter's b value  10.1 10.2 8.4 9.2
eltapine 41 coneville 506 eltapine 61	UHM (inches) 1.10 1.10 1.10 1.09 1.09	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5	70.2 67.5 65.8 61.0 67.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5
eltapine 41 coneville 506 eltapine 61 eltapine 55	UHM (inches) 1.10 1.10 1.10 1.09 1.09	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0	70.2 67.5 65.8 61.0 67.5 65.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3
eltapine 41 coneville 506 eltapine 61 eltapine 55 eNair 220 oker 315	UHM (inches) 1.10 1.10 1.10 1.09 1.09 1.06	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0 23.0	70.2 67.5 65.8 61.0 67.5 65.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6
eltapine 41 coneville 506 eltapine 61 eltapine 55 example 220 oker 315 oker 310	UHM (inches) 1.10 1.10 1.10 1.09 1.09 1.06 1.06	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0 23.0 25.5	70.2 67.5 65.8 61.0 67.5 65.5 63.8 60.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6 8.2
eltapine 41 coneville 506 eltapine 61 eltapine 55 example 220 example 315 example 315 example 315 example 316 example 316 example 317 example 318	UHM (inches)  1.10 1.10 1.10 1.09 1.09 1.06 1.06 1.12 1.12	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5 82.5 83.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0 23.0 25.5 24.0	70.2 67.5 65.8 61.0 67.5 65.5 63.8 60.5 58.2	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6 8.2 9.2
eltapine 41 coneville 506 eltapine 61 eltapine 55 exair 220 oker 315 oker 310 oker 8304 oker 420	UHM (inches)  1.10 1.10 1.10 1.09 1.09 1.06 1.12 1.12 1.12	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5 82.5 83.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0 25.5 24.0	70.2 67.5 65.8 61.0 67.5 63.8 60.5 58.2 67.2	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6 8.2 9.2 9.1
eltapine 41 coneville 506 eltapine 61 eltapine 55 exair 220 exair 315 exair 310 exair 310 exair 235	UHM (inches)  1.10 1.10 1.10 1.09 1.09 1.06 1.12 1.12 1.12 1.13	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5 82.5 82.5 83.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0 25.5 24.0 25.0 23.0	70.2 67.5 65.8 61.0 67.5 65.5 63.8 60.5 58.2 67.2 65.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6 8.2 9.2 9.1 9.5
eltapine 41 coneville 506 eltapine 61 eltapine 55 exair 220 exair 315 exair 310 exair 310 exair 235	UHM (inches)  1.10 1.10 1.10 1.09 1.09 1.06 1.12 1.12 1.12	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5 82.5 83.5	Tenacity (g/tex)  24.0 24.5 24.5 24.0 23.5 24.0 23.0 25.5 24.0 25.0 23.0 23.0	70.2 67.5 65.8 61.0 67.5 63.8 60.5 58.2 67.2 65.5 61.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6 8.2 9.2 9.1 9.5 8.3
coneville 213 eltapine 41 coneville 506 eltapine 61 eltapine 55 extrapine 315 oker 315 oker 310 oker 420 extrapine 303	UHM (inches)  1.10 1.10 1.10 1.09 1.09 1.06 1.12 1.12 1.12 1.13	Uniformity (percent) 83.5 83.5 83.5 84.0 83.0 84.5 82.5 82.5 82.5 83.5	Tenacity (g/tex) 24.0 24.5 24.5 24.0 23.5 24.0 25.5 24.0 25.0 23.0	70.2 67.5 65.8 61.0 67.5 65.5 63.8 60.5 58.2 67.2 65.5	Hunter's b value  10.1 10.2 8.4 9.2 9.5 9.3 10.6 8.2 9.2 9.1 9.5

Table 12. Eastern test: Seed data for Tifton, Ga.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	16.3	3.36	0.64	14.0	5.5
Deltapine 41	16.7	3.57	• 60	11.4	6.5
Stoneville 506	17.4	3.61	•47	12.1	6.5
Deltapine 61	18.7	3.52	• 55	11.5	7.0
Deltapine 55	17.2	3.51	•65	11.6	6.0
McNair 220	18.3	3.57	• 56	11.8	7.0
Coker 315	18.8	3.59	•64	13.1	5.5
Coker 310	18.3	3.54	.67	12.8	6.0
Coker 8304	18.9	3.64	•66	12.2	7.0
Coker 420	19.5	3.65	•76	14.0	5.0
McNair 235	18.8	3.66	•62	11.5	6.0
Ga Cot 79	17.8	3.48	.49	11.6	7.0
Paymaster 303	19.3	3.63	•63	11.0	6.0
Acala SJ-5	18.1	3.61	.51	10.7	5.5
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Stoneville 213	96.4	110.3	1.007	1.3	9.4
Deltapine 41	82.5	99.4	1.019	2.8	9.5
Stoneville 506	94.4	108.8	1.026	1.5	9.7
Deltapine 61	92.9	107.7	1.036	0.3	9.6
Deltapine 55	89.2	104.7	1.025	1.0	9.1
McNair 220	93.3	107.9	1.021	1.3	9.5
Coker 315	86.8	102.9	1.057	1.0	9.2
Coker 310	96.0	110.0	1.055	2.0	10.1
Coker 8304	92.2	107.1	1.063	2.0	9.7
Coker 420	87.3	103.3	1.069	1.8	9.3
McNair 235	88.5	104.2	1.021	2.5	9.0
Ga Cot 79	84.0	100.7	1.048	1.0	8.8
Paymaster 303	101.3	113.1	1.021	2.0	10.3

Table 13. Eastern test: Yield, boll and yarn tenacity data for Ames Plantation, Tenn.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	756 a	4.77	39.9	10.5	150
McNair 220	740 ab	4.88	38.5	11.4	150
Stoneville 213	739 ab	4.97	37.9	11.8	145
Coker 8304	699 abc	4.88	37.6	11.9	164
Stoneville 506	691 bcd	4.19	37.6	11.8	148
Deltapine 55	674 cde	4.71	38.6	10.9	146
Coker 315	673 cde	4.75	38.7	12.3	162
Coker 310	668 cde	5.30	38.4	11.4	154
Deltapine 61	663 cde	4.99	35.5	11.4	152
Deltapine 41	632 de	4.50	39.9	11.3	151
Coker 420	620 e	4.65	35.8	11.5	176
Paymaster 303	616 e	4.91	37.0	11.5	144
Acala SJ-5	549 f	5.17	36.8	12.2	198
Ga Cot 79	513 f	4.28	33.5	10.6	160

Table 14. Eastern test: Fiber data for Ames Plantation, Tenn.

2.5% S.L. (inches)  1.11 1.12 1.10 1.18 1.14 1.15 1.16 1.14 1.15	50% S.L. (inches) 0.54 .54 .52 .56 .54 .54 .56	T <sub>1</sub> (mN/tex)  194 199 198 208 196 183 200 208	E1 (percent)  5.4 5.1 6.3 5.5 6.0 5.6 6.4	4.50 4.60 4.95 4.40 4.85 4.65 4.60
1.12 1.10 1.18 1.14 1.15 1.16 1.14	.54 .52 .56 .54 .54 .56	199 198 208 196 183 200	5.1 6.3 5.5 6.0 5.6 6.4	4.60 4.95 4.40 4.85 4.65
1.12 1.10 1.18 1.14 1.15 1.16 1.14	.54 .52 .56 .54 .54 .56	199 198 208 196 183 200	5.1 6.3 5.5 6.0 5.6 6.4	4.60 4.95 4.40 4.85 4.65
1.10 1.18 1.14 1.15 1.16 1.14	.52 .56 .54 .54 .56	198 208 196 183 200	6.3 5.5 6.0 5.6 6.4	4.95 4.40 4.85 4.65
1.18 1.14 1.15 1.16 1.14 1.14	.56 .54 .54 .56 .52	208 196 183 200	5.5 6.0 5.6 6.4	4.40 4.85 4.65
1.14 1.15 1.16 1.14 1.14	.54 .54 .56 .52	196 183 200	6.0 5.6 6.4	4.85 4.65
1.15 1.16 1.14 1.14	.54 .56 .52	183 200	5.6 6.4	4.65
1.16 1.14 1.14	.56 .52	200	6.4	
1.14 1.14	. 52			
1.14			5.9	4.55
	• > >	202	7.1	5.10
1.10	• 58	198	5.8	4.70
1.21	.61	226	6.2	4.40
				4.45
				4.45
				4.50
1.13	• • • • • • • • • • • • • • • • • • • •	203	•••	1.30
High	n Volume Instru	ment	Color	rimeter
UHM	Uniformity	Tenacity	$R_d$	Hunter's
(inches)	(percent)	(g/tex)		b value
1.18	85.0	23.5	65.2	11.3
				12.2
				12.2
				12.3
				11.1
				11.9
				11.9
				11.0
				11.3
				12.0
				11.7
				12.2
				12.2
				11.3
	1.06 1.16 1.13 High	1.06 1.16 1.13  High Volume Instru  UHM Uniformity (inches) (percent)  1.18 85.0 1.14 84.5 1.12 83.0 1.21 85.0 1.16 84.5 1.13 82.5 1.13 82.5 1.14 83.5 1.18 84.5 1.17 84.5 1.18 84.5 1.17 84.5 1.28 87.0	1.06 1.16 1.18 1.18 1.18 1.18 1.18 1.19 1.18 1.19 1.19	1.06 1.16 1.13 1.58 2.50 2.55 1.13 1.54   High Volume Instrument  UHM Uniformity Tenacity (g/tex)   1.18 85.0 23.5 65.2 1.14 84.5 23.5 69.0 1.12 83.0 25.5 67.2 1.21 85.0 25.0 70.8 1.16 84.5 24.5 70.8 1.13 82.5 22.0 71.5 1.22 85.0 26.0 68.0 1.14 83.5 24.0 61.0 1.18 84.5 25.0 71.0 1.18 84.5 23.5 71.0 1.25 85.5 26.0 70.2 1.10 83.5 22.0 65.5 1.22 87.0 29.5 68.0

Table 15. Eastern test: Seed data for Ames Plantation, Tenn.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
225	17 0	2 //	0. 67	10 1	/ -
McNair 235	17.8	3.44	0.67	10.1	4.5
McNair 220	18.2	3.54	.71	9.3	4.0
Stoneville 213	15.7	3.29	.59	14.9	3.0
Coker 8304	18.4	3.52	.69	11.0	3.5
Stoneville 506	16.7	3.40	.67	11.9	4.0
Deltapine 55	16.5	3.48	• 59	11.1	4.0
Coker 315	17.8	3.54	.72	10.6	4.0
Coker 310	18.1	3.45	.74	11.5	4.0
Deltapine 61	17.9	3.44	.71	11.0	5.0
Deltapine 41	16.4	3.56	• 52	9.4	4.5
Coker 420	18.3	3.61	•96	14.2	3.0
Paymaster 303	18.4	3.46	•50	10.9	3.5
Acala SJ-5	18.8	3.70	.48	10.4	3.0
Ga Cot 79	16.1	3.20	•48	12.4	5.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm²)	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
McNair 235	99.9	113.0	0.930	4.3	9.3
McNair 220	103.1	115.4	.927	2.5	9.3
Stoneville 213	101.0	113.8	• 904	4.3	9.1
Coker 8304	102.5	115.0	•963	2.3	9.9
Stoneville 506	104.6	116.5	. 907	5.5	9.5
Deltapine 55	100.1	113.1	.930	2.3	9.3
Coker 315	103.2	115.4	.978	1.8	9.8
Coker 310	102.1	114.7	.977	2.5	10.0
Deltapine 61	98.0	111.6	.941	5.0	9.7
Deltapine 41	97.6	111.3	.917	3.3	13.9
Coker 420	102.2	114.7	.964	1.8	10.3
Paymaster 303	109.1	119.8	•935	4.3	10.2
Acala SJ-5	116.0	124.8	.963	1.5	11.2
Ga Cot 79	103.1	115.3	.915	7.3	9.2

Table 16. Eastern test: Yield, boll and yarn tenacity data for Milan, Tenn.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	730 a	4.90	36.2	10.3	152
McNair 235	676 ab	4.76	36.8	10.7	162
Deltapine 55	586 bc	4.43	38.2	9.9	158
McNair 220	583 bc	4.69	36.5	12.2	168
Stoneville 506	569 bc	4.56	34.1	11.3	158
Deltapine 41	564 bc	4.67	38.4	10.2	166
Acala SJ-5	555 bc	4.86	34.3	11.1	199
Coker 310	541 bc	5.17	35.6	11.4	168
Coker 315	541 bc	4.99	36.4	10.9	180
Coker 8304	525 c	4.54	35.7	11.0	168
Deltapine 61	502 c	4.58	34.9	11.6	162
Coker 420	494 c	4.34	33.9	11.0	176
Paymaster 303	483 c	5.05	35.1	11.2	145
Ga Cot 79	459 c	4.36	31.7	11.7	166

Table 17. Eastern test: Fiber data for Milan, Tenn.

ariety	Digital F:			meter	Micronaire
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E1	reading
	(inches)	(inches)	(mN/tex)	(percent)	
stoneville 213	1.14	0.50	193	6.0	4.60
IcNair 235	1.15	•52	219	5.2	4.20
eltapine 55	1.14	.51	182	5.4	4.00
cNair 220	1.12	•52	206	5.0	4.15
toneville 506	1.11	.50	201	5.6	4.25
eltapine 41	1.14	.52	196	5.4	4.35
cala SJ-5	1.19	.58	258	5.5	4.10
oker 310	1.17	•55	206	5.2	4.25
oker 315	1.18	•54	201	5.3	4.35
oker 8304	1.15	•52	200	5.2	3.95
eltapine 61	1.14	.50	209	6.0	4.45
oker 420	1.20	•56	191	5.4	4.15
	1.04	.47	182	5.0	4.05
aymaster 303			226		
a Cot 79	1.18	• 54	220	6.5	4.05
	High	n Volume Instru	ment		rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
tonovi11 o 213	1 15	83 0	24 5	71 5	13 6
	1.15	83.0	24.5	71.5	13.6
cNair 235	1.18	84.5	22.5	70.8	13.4
cNair 235eltapine 55	1.18 1.20	84.5 82.5	22.5 22.5	70.8 72.5	13.4 13.5
cNair 235 eltapine 55 cNair 220	1.18 1.20 1.14	84.5 82.5 83.5	22.5 22.5 23.5	70.8 72.5 71.5	13.4 13.5 12.9
cNair 235eltapine 55cNair 220toneville 506	1.18 1.20 1.14 1.12	84.5 82.5 83.5 81.5	22.5 22.5 23.5 25.0	70.8 72.5 71.5 69.8	13.4 13.5 12.9 12.6
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41	1.18 1.20 1.14 1.12 1.16	84.5 82.5 83.5 81.5 84.5	22.5 22.5 23.5 25.0 24.0	70.8 72.5 71.5 69.8 70.8	13.4 13.5 12.9 12.6 13.9
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5	1.18 1.20 1.14 1.12 1.16 1.19	84.5 82.5 83.5 81.5 84.5 86.0	22.5 22.5 23.5 25.0 24.0 29.0	70.8 72.5 71.5 69.8 70.8 74.0	13.4 13.5 12.9 12.6 13.9
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5 oker 310	1.18 1.20 1.14 1.12 1.16 1.19	84.5 82.5 83.5 81.5 84.5 86.0 85.0	22.5 22.5 23.5 25.0 24.0 29.0 22.0	70.8 72.5 71.5 69.8 70.8 74.0	13.4 13.5 12.9 12.6 13.9 13.0
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5 oker 310	1.18 1.20 1.14 1.12 1.16 1.19 1.22 1.24	84.5 82.5 83.5 81.5 84.5 86.0 85.0	22.5 22.5 23.5 25.0 24.0 29.0 22.0 26.5	70.8 72.5 71.5 69.8 70.8 74.0 73.8 71.5	13.4 13.5 12.9 12.6 13.9 13.0 12.6 12.8
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5 oker 310 oker 315 oker 8304	1.18 1.20 1.14 1.12 1.16 1.19 1.22 1.24	84.5 82.5 83.5 81.5 84.5 86.0 85.0 83.5	22.5 22.5 23.5 25.0 24.0 29.0 22.0 26.5 25.0	70.8 72.5 71.5 69.8 70.8 74.0 73.8 71.5 68.0	13.4 13.5 12.9 12.6 13.9 13.0 12.6 12.8
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5 oker 310 oker 315 oker 8304	1.18 1.20 1.14 1.12 1.16 1.19 1.22 1.24 1.21	84.5 82.5 83.5 81.5 84.5 86.0 85.0 83.5 82.5	22.5 22.5 23.5 25.0 24.0 29.0 22.0 26.5 25.0 24.5	70.8 72.5 71.5 69.8 70.8 74.0 73.8 71.5 68.0 71.0	13.4 13.5 12.9 12.6 13.9 13.0 12.6 12.8 13.1
cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5 oker 310 oker 315 oker 8304 eltapine 61 oker 420	1.18 1.20 1.14 1.12 1.16 1.19 1.22 1.24 1.21 1.22	84.5 82.5 83.5 81.5 84.5 86.0 85.0 83.5 82.5 83.5	22.5 22.5 23.5 25.0 24.0 29.0 22.0 26.5 25.0 24.5 25.0	70.8 72.5 71.5 69.8 70.8 74.0 73.8 71.5 68.0 71.0	13.4 13.5 12.9 12.6 13.9 13.0 12.6 12.8 13.1 13.6 12.8
toneville 213 cNair 235 eltapine 55 cNair 220 toneville 506 eltapine 41 cala SJ-5 oker 310 oker 315 oker 315 oker 420 aymaster 303	1.18 1.20 1.14 1.12 1.16 1.19 1.22 1.24 1.21	84.5 82.5 83.5 81.5 84.5 86.0 85.0 83.5 82.5	22.5 22.5 23.5 25.0 24.0 29.0 22.0 26.5 25.0 24.5	70.8 72.5 71.5 69.8 70.8 74.0 73.8 71.5 68.0 71.0	13.4 13.5 12.9 12.6 13.9 13.0 12.6 12.8 13.1

Table 18. Eastern test: Seed data for Milan, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	15.0	3.33	0.50	12.0	3.0
McNair 235	17.6	3.61	•54	9.9	4.5
Deltapine 55	15.9	3.50	.50	8.8	5.0
McNair 220	16.5	3.70	.44	8.6	4.0
Stoneville 506	16.1	3.54	.44	8.4	4.5
Deltapine 41	15.8	3.61	. 47	7.2	4.5
Acala SJ-5	17.8	3.75	.47	9.0	3.0
Coker 310	17.3	3.79	.59	10.0	4.0
				8.8	
Coker 315	17.9	3.73	• 57	•	4.0
Coker 8304	17.5	3.81	.54	9.0	4.0
Deltapine 61	17.3	3.56	• 51	8.6	4.5
Coker 420	18.7	· 3 • 76	.79	10.5	4.0
Paymaster 303	17.9	3.62	• 50	8.9	4.0
Ga Cot 79	16.2	3.22	•42	9.2	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Stoneville 213	100.3	113.3	0.900	2.5	9.0
McNair 235	98.0	115.4	.921	2.3	9.0
Deltapine 55	98.1	111.7	. 884	2.5	8.7
McNair 220	103.3	115.5	.881	3.8	9.1
Stoneville 506	109.4	120.1	. 889	2.8	9.7
Deltapine 41	95.9	110.0	.883	1.8	8.5
Acala SJ-5	113.9	123.3	•926	2.5	10.5
Coker 310	105.6	117.2	.939	3.0	9.9
Coker 315	102.6	115.0	• 953	3.0	9.8
Coker 8304	102.3	114.8	.950	2.3	9.7
Deltapine 61	102.3	114.8	.913	2.0	9.3
Coker 420	98.2	111.7	.958	2.3	9.5
	70.2				
	108.1	119.1	908	7 X	y u
Paymaster 303	108.1 107.5	119.1 118.6	.908 .917	2.8 1.5	9.9 9.9

Table 19. Eastern test: Yield, boll and yarn tenacity data for Jackson, Tenn.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 61	704 a	5.19	31.7	12.5	166
Paymaster 303	689 ab	6.05	32.5	11.3	154
McNair 220	684 ab	4.71	33.9	10.4	166
McNair 235	682 ab	4.89	33.9	9.8	162
Stoneville 213	677 abc	4.99	31.6	11.2	151
Stoneville 506	654 abcd	4.97	31.3	11.5	154
Deltapine 41	645 abcd	4.65	34.6	10.2	172
Coker 310	589 bcd	5.38	32.5	11.2	176
Acala SJ-5	584 bcd	5.12	32.5	11.6	188
Deltapine 55	582 bcd	4.02	33.5	10.5	164
Coker 8304	574 cd	5.16	31.5	10.6	166
Coker 420	557 d	4.50	31.3	11.2	180
Coker 315	557 d	5 • 47	33.6	10.8	167
Ga Cot 79	549 d	4.35	28.4	12.3	168

Table 20. Eastern test: Fiber data for Jackson, Tenn.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Deltapine 61	1.20	0.60	216	7.2	4.65
Paymaster 303	1.11	• 52	205	5.3	3.60
McNair 220	1.14	•52	216	5.8	3.95
McNair 235	1.15	.51	213	5.6	3.90
Stoneville 213	1.18	•54	217	5.8	4.25
Stoneville 506	1.18	• 54	214	6.4	3.75
Deltapine 41	1.18	•56	213	5.6	4.15
Coker 310	1.25	• 59	228	5.7	3.80
Acala SJ-5	1.20	.60	276	6.2	3.65
Deltapine 55	1.16	.50	211	5.8	3.95
Coker 8304	1.22	.58	210	5.3	4.30
Coker 420	1.21	•57	240	6.0	3.95
Coker 315	1.20	•56	222	5.5	4.25
Ga Cot 79	1.18	•57	225	7.3	4.10
	2.0				
	Hig	h Volume Instru	ment		orimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
D 1	1 0/	0.5	27.0	(0.0	12.0
Deltapine 61	1.24	85.5	27.0	69.8	12.9
Paymaster 303	1.13	83.0	23.0	73.5	13.1
McNair 220	1.20	83.5	25.5	72.2	12.7
McNair 235	1.18	82.5	25.0	73.5	13.0
Stoneville 213	1.23	83.5	25.5	69.0	12.8
Stoneville 506	1.24	84.0	25.0	72.8	11.7
Deltapine 41	1.18	83.5	26.0	72.0	13.2
Coker 310	1.27	84.0	26.0	70.8	13.2
	1.22	86.0	28.5	73.2	12.0
Acala SJ-5			0/ 0	700	
Deltapine 55	1.18	82.0	26.0	70.2	13.4
Deltapine 55 Coker 8304	1.18 1.24	82.0 84.5	24.5	70.2	12.4
Deltapine 55  Coker 8304  Coker 420	1.18 1.24 1.26	82.0 84.5 84.5	24.5 27.5	70.2 73.5	12.4 12.0
Deltapine 55 Coker 8304	1.18 1.24	82.0 84.5	24.5	70.2	12.4

Table 21. Eastern test: Seed data for Jackson, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Doltanina 61	16.7	3.52	0.47	8.9	4.5
Deltapine 61 Paymaster 303	17.5	3.68	.48	10.2	4.0
McNair 220	16.8	3.67	.47	9.6	4.5
McNair 235	16.7	3.61	•50	8.7	4.5
Stoneville 213	14.7	3.46	•47	13.4	3.0
Stoneville 506	16.0	3.54	.48	9.5	4.0
Deltapine 41	15.6	3.72	•52	9.1	4.5
Coker 310	17.1	3.77	•56	9.1	4.0
Acala SJ-5	16.7	3.64	.49	8.4	3.0
	15.2		. 46		
Deltapine 55		3.52		9.2	5.0
Coker 8304	17.2	3.70	•57	9.6	4.5
Coker 420	18.8	3.81	.88	12.0	4.0
Coker 315	17.6	3.73	•52	9.3	4.5
Ga Cot 79	16.0	3.39	• 51	9.7	4.5
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm²)	$(g/cm^3)$	· ·	seed index
Deltapine 61	111.5	121.6	•912	3.3	10.1
Paymaster 303	110.6	121.0	.921	4.5	10.2
McNair 220	110.0	120.5	.877	4.3	10.7
McNair 235	107.6	119.1	.881	4.8	9.5
	113.3	100 0	94.0	9.0	9.2
Stoneville 213	TIDOD	122.9	• 849	J • U	- · · -
	113.1	122.9	.871	7.0	9.8
Stoneville 506					
Stoneville 506 Deltapine 41	113.1	122.7	.871	7.0	9.8
Stoneville 506  Deltapine 41  Coker 310	113.1 101.1 109.9	122.7 113.9 120.4	.871 .884 .940	7.0 3.8	9.8 8.9
Stoneville 506  Deltapine 41  Coker 310  Acala SJ-5	113.1 101.1 109.9 114.7	122.7 113.9 120.4 123.9	.871 .884 .940 .903	7.0 3.8 4.8 7.5	9.8 8.9 10.3 10.3
Stoneville 506  Deltapine 41  Coker 310  Acala SJ-5  Deltapine 55	113.1 101.1 109.9 114.7 105.1	122.7 113.9 120.4 123.9 116.9	.871 .884 .940 .903 .880	7.0 3.8 4.8 7.5 3.3	9.8 8.9 10.3 10.3 9.3
Stoneville 506  Deltapine 41  Coker 310  Acala SJ-5  Deltapine 55  Coker 8304	113.1 101.1 109.9 114.7 105.1 108.8	122.7 113.9 120.4 123.9 116.9 119.6	.871 .884 .940 .903 .880	7.0 3.8 4.8 7.5 3.3 3.8	9.8 8.9 10.3 10.3 9.3 10.2
Stoneville 506  Deltapine 41  Coker 310  Acala SJ-5  Deltapine 55	113.1 101.1 109.9 114.7 105.1	122.7 113.9 120.4 123.9 116.9	.871 .884 .940 .903 .880	7.0 3.8 4.8 7.5 3.3	9.8 8.9 10.3 10.3 9.3

Table 22. Eastern test: Yield, boll and yarn tenacity data for Crossville, Ala.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 235	598 a	3.96	42.6	7.9	NA
Deltapine 55	588 ab	4.42	42.3	8.5	NA NA
Stoneville 506	562 abc	3.65	41.4	8.1	NA NA
	550 abcd	2.79	44.4	7.2	NA NA
Deltapine 41		4.26	4.15	· –	
McNair 220	534 abcd	· — -		8.3	NA
Coker 310	530 abcd	4.41	41.4	8.1	NA
Stoneville 213	521 abcd	4.22	42.7	8.1	NA
Coker 8304	511 abcd	5.18	42.2	8.9	NA
Paymaster 303	500 bcd	4.79	40.2	9.7	NA
Coker 420	494 cd	4.75	40.2	9.2	NA
Coker 315	485 cd	3.91	41.5	9.1	NA
Deltapine 61	463 de	4.23	41.0	8.6	NA
Acala SJ-5	386 ef	4.74	39.8	10.9	NA
Ga Cot 79	332 f	4.05	41.7	7.7	NA

NA, Data not available.

Table 23. Eastern test: Yield, boll and yarn tenacity data for Rocky Mount, N.C.

Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
539 2	4 85	30 3	9 0	138
				137
				146
				123
<del>-</del>				144
				145
				140
	4.71	40.5	9.6	138
	5.06	41.3	8.9	142
	5.02	38.5	9.8	146
	4.64	42.3	8.2	155
422 c	5.97	39.1	10.2	183
418 c	5.57	39.3	9.8	120
417 c	4.67	37.8	9.1	144
	(1b/acre)  539 a 536 a 536 a 530 a 522 a 502 ab 485 ab 485 ab 464 bc 458 bc 446 bc 422 c 418 c	(1b/acre) (g/boll)  539 a	(1b/acre)     (g/boll)     percent       539 a     4.85     39.3       536 a     4.75     41.4       536 a     4.80     40.2       530 a     4.74     40.1       522 a     5.31     41.5       502 ab     4.81     38.5       485 ab     5.16     39.6       485 ab     4.71     40.5       464 bc     5.06     41.3       458 bc     5.02     38.5       446 bc     4.64     42.3       422 c     5.97     39.1       418 c     5.57     39.3	(1b/acre)     (g/boll)     percent     index       539 a     4.85     39.3     9.0       536 a     4.75     41.4     8.9       536 a     4.80     40.2     8.9       530 a     4.74     40.1     9.4       522 a     5.31     41.5     9.4       502 ab     4.81     38.5     9.3       485 ab     5.16     39.6     9.7       485 ab     4.71     40.5     9.6       464 bc     5.06     41.3     8.9       458 bc     5.02     38.5     9.8       446 bc     4.64     42.3     8.2       422 c     5.97     39.1     10.2       418 c     5.57     39.3     9.8

Table 24. Eastern test: Fiber data for Rocky Mount, N.C.

ariety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E1 (percent)	reading
toneville 213	1.01	0.48	193	7.4	4.40
Nair 235	•98	• 46	171	5.2	4.70
Nair 220	.98	.46	192	5.5	4.40
oneville 506	1.04	•50	180	6.1	4.80
oker 315	1.02	.48	187	6.5	4.80
oker 420	1.06	.51	187	6.6	4.80
oker 310	1.04	.49	174	6.2	4.20
oker 8304	1.00	• 46	184	6.2	4.90
eltapine 55	1.02	•47	180	6.5	4.45
eltapine 61	1.04	•52	204	7.8	4.80
eltapine 41	1.00	•47	192	6.1	4.70
ala SJ-5	1.05	• 54	236	6.2	4.35
ymaster 303	•96	•46	156	6.0	4.65
J					
Cot 79	1.02	•49	198	6.9	4.75
Cot 79		.49 h Volume Instru		<u></u>	rimeter
Cot 79				<u></u>	
Cot 79	Hig	h Volume Instru	ment	Colo	rimeter
	UHM (inches)	h Volume Instru Uniformity (percent)	ment Tenacity (g/tex)	$\frac{\text{Colo}}{R_d}$	rimeter  Hunter's  b value
coneville 213	UHM (inches)	h Volume Instru Uniformity (percent) 82.0	Tenacity (g/tex)	Color R <sub>d</sub> 66.5	rimeter  Hunter's  b value
oneville 213	Higher UHM (inches)  1.02 .97	h Volume Instru Uniformity (percent) 82.0 81.5	Tenacity (g/tex)  24.5 22.5	Color R <sub>d</sub> 66.5 69.0	Hunter's b value  10.3 9.1
coneville 213 Nair 235 Nair 220	Hig UHM (inches) 1.02 .97 1.03	h Volume Instru Uniformity (percent) 82.0 81.5 82.5	Tenacity (g/tex) 24.5 22.5 22.0	Color Rd  66.5 69.0 68.2	Hunter's b value  10.3 9.1 9.5
coneville 213  Nair 235  Nair 220  coneville 506	High UHM (inches) 1.02 .97 1.03 1.04	h Volume Instru Uniformity (percent) 82.0 81.5 82.5	Tenacity (g/tex) 24.5 22.5 22.0 22.0	Color R <sub>d</sub> 66.5 69.0 68.2 70.2	Hunter's b value  10.3 9.1 9.5 9.4
coneville 213  Nair 235  Nair 220  coneville 506  oker 315	High UHM (inches) 1.02 .97 1.03 1.04 1.01	h Volume Instru Uniformity (percent)  82.0 81.5 82.5 82.5 82.0	Tenacity (g/tex) 24.5 22.5 22.0 22.0 22.5	Color Rd  66.5 69.0 68.2 70.2 69.0	Hunter's b value  10.3 9.1 9.5 9.4 9.7
coneville 213 Nair 235 Nair 220 coneville 506 oker 315	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.5	Tenacity (g/tex) 24.5 22.5 22.0 22.0 22.5 23.5	Color R <sub>d</sub> 66.5 69.0 68.2 70.2 69.0 70.2	10.3 9.1 9.5 9.4 9.7
Oneville 213 Nair 235 Nair 220 oneville 506 oker 315 oker 420	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08 1.00	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.0 83.5 81.0	Tenacity (g/tex)  24.5 22.5 22.0 22.0 22.5 23.5 22.0	Color R <sub>d</sub> 66.5 69.0 68.2 70.2 69.0 70.2 70.8	10.3 9.1 9.5 9.4 9.7 9.7 10.2
coneville 213  Nair 235  Nair 220  oneville 506  oker 315  oker 420  oker 310  oker 8304	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08 1.00	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.0 83.5 81.0 82.5	Tenacity (g/tex)  24.5 22.5 22.0 22.0 22.5 23.5 22.0 22.0	Color Rd  66.5 69.0 68.2 70.2 69.0 70.2 70.8 67.8	10.3 9.1 9.5 9.4 9.7 9.7 9.7
coneville 213  chair 235  chair 220  coneville 506  coker 315  coker 420  coker 310  coker 8304  coker 8304	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08 1.00 1.02 1.02	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.0 83.5 81.0 82.5 82.0	Tenacity (g/tex)  24.5 22.5 22.0 22.0 22.5 23.5 22.0 22.0 22.0	Color Rd  66.5 69.0 68.2 70.2 69.0 70.2 70.8 67.8 69.5	10.3 9.1 9.5 9.4 9.7 9.7 10.2 9.3 10.0
coneville 213  Nair 235  Nair 220  coneville 506  oker 315  oker 310  oker 310  oker 8304  eltapine 55	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08 1.00 1.02 1.02	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.0 83.5 81.0 82.5 82.0	Tenacity (g/tex)  24.5 22.5 22.0 22.0 22.5 23.5 22.0 22.0 22.0 25.0	Color Rd  66.5 69.0 68.2 70.2 69.0 70.2 70.8 67.8 69.5 68.0	10.3 9.1 9.5 9.4 9.7 9.7 10.2 9.3 10.0 9.7
coneville 213  chair 235  chair 220  coneville 506  coker 315  coker 420  coker 310  coker 8304	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08 1.00 1.02 1.02 1.02	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.0 83.5 81.0 82.5 82.0 84.0 83.5	Tenacity (g/tex)  24.5 22.5 22.0 22.0 22.0 22.0 22.0 22.0 22	Color Rd  66.5 69.0 68.2 70.2 69.0 70.2 70.8 67.8 69.5 68.0 70.2	10.3 9.1 9.5 9.4 9.7 9.7 10.2 9.3 10.0 9.7 10.9
coneville 213  cNair 235  cNair 220  coneville 506  coker 315  coker 310  coker 310  coker 8304  coker 8304	High UHM (inches) 1.02 .97 1.03 1.04 1.01 1.08 1.00 1.02 1.02	Nolume Instru Uniformity (percent) 82.0 81.5 82.5 82.5 82.0 83.5 81.0 82.5 82.0	Tenacity (g/tex)  24.5 22.5 22.0 22.0 22.5 23.5 22.0 22.0 22.0 25.0	Color Rd  66.5 69.0 68.2 70.2 69.0 70.2 70.8 67.8 69.5 68.0	10.3 9.1 9.5 9.4 9.7 9.7 10.2 9.3 10.0 9.7

Table 25. Eastern test: Seed data for Rocky Mount, N.C.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	17.5	3.78	0.64	11.2	5.0
McNair 235	18.2	3.75	• 57	9.8	5.5
McNair 220	18.6	3.75	•55	10.4	6.0
Stoneville 506	17.8	3.81	• 54	11.0	6.0
Coker 315	18.6	3.99	•58	10.6	4.5
Coker 420	19.0	3.99	.84	13.0	3.5
Coker 310	18.5	3.96	•59	10.9	4.5
Coker 8304	18.8	3.92	•57	11.1	5.0
Deltapine 55	17.4	3.87	•65	9.8	6.0
Deltapine 61	18.5	3.74	• 57	10.3	6.0
Deltapine 41	17.2	3.84	•61	10.3	5.0
Acala SJ-5	19.2	3.97	• 52	10.3	4.5
Paymaster 303	17.3	3.78	•57	10.6	5.0
Ga Cot 79	18.2	3.73	•60	10.3	6.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Stoneville 213	82.8	99.7	1.011	1.8	8.4
McNair 235	81.2	98.4	1.022	1.5	8.6
McNair 220	82.4	99.4	1.015	1.3	8.4
Stoneville 506	86.3	102.5	1.022	4.0	8.8
	00.5	102.0	1.022	4.0	0.0
	82.7	99.6	1 . 084	1.8	9.0
Coker 315	82.7 79.7	99 • 6 97 • 2	1.084	1.8	9.0 8.6
Coker 315 Coker 420	79.7	97.2	1.081	1.5	8.6
Coker 315	79.7 82.7	97.2 99.6	1.081 1.066	1.5 1.8	8.6 8.8
Coker 315	79.7 82.7 84.7	97.2 99.6 101.2	1.081 1.066 1.070	1.5 1.8 .8	8.6 8.8 8.6
Coker 315	79.7 82.7 84.7 81.0	97.2 99.6 101.2 98.2	1.081 1.066 1.070 1.026	1.5 1.8 .8 3.3	8.6 8.8 8.6 8.3
Coker 315	79.7 82.7 84.7 81.0 84.3	97.2 99.6 101.2 98.2 100.8	1.081 1.066 1.070 1.026 1.043	1.5 1.8 .8 3.3 3.0	8.6 8.8 8.6 8.3 9.1
Coker 315	79.7 82.7 84.7 81.0 84.3 75.9	97.2 99.6 101.2 98.2 100.8 94.1	1.081 1.066 1.070 1.026 1.043 1.011	1.5 1.8 .8 3.3 3.0 3.0	8.6 8.8 8.6 8.3 9.1 7.7
Coker 315	79.7 82.7 84.7 81.0 84.3	97.2 99.6 101.2 98.2 100.8	1.081 1.066 1.070 1.026 1.043	1.5 1.8 .8 3.3 3.0	8.6 8.8 8.6 8.3 9.1

Table 26. Eastern test: Yield, boll and yarn tenacity data for Auburn, Ala.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/ tex)
McNair 235	220 a	4.05	41.2	NA	122
McNair 220	218 a	3.82	40.7	NA	134
Deltapine 55	197 ab	3.61	42.5	NA	120
Stoneville 213	195 ab	3.99	41.4	NA	130
Deltapine 41	194 ab	3.74	4.26	NA	131
Deltapine 61	173 ab	4.21	3.99	NA	136
Coker 8304	166 ab	4.39	4.07	NA	134
Coker 315	160 ab	3.88	3.96	NA	128
Coker 420	160 ab	3.83	38.7	NA	138
Ga Cot 79	151 Ъ	3.48	38.8	NA	119
Stoneville 506	150 Ъ	3.55	40.3	NA	123
Coker 310	149 Ъ	4.11	39.8	NA	140
Paymaster 303	134 bc	4.50	38.9	NA	110
Acala SJ-5	88 c	3.76	39.9	NA	162

Table 27. Eastern test: Fiber data for Auburn, Ala.

Variety	Digital F	ibrograph		meter	Micronaire
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
McNair 235	1.02	0.46	172	5.1	4.70
McNair 220	•98	. 44	166	4.9	5.05
Deltapine 55	1.01	•46	162	5.3	4.45
Stoneville 213	1.00	•46	174	5.7	5.30
Deltapine 41	1.00	. 44	168	5.0	4.80
Deltapine 61	1.04	• 47	173	6.3	5.20
Coker 8304	1.00	.44	186	4.8	4.70
Coker 315	1.00	.42	184	4.9	4.85
Coker 420	1.05	•48	200	5.4	4.65
Ga Cot 79	•99	. 44	194	7.0	4.80
Stoneville 506	1.00	•46	166	5.2	5.10
Coker 310	1.04	• 46	181	5.0	4.75
Paymaster 303	•97	•43	160	4.7	4.45
Acala SJ-5	1.06	• 48	218	5.0	4.25
	High	h Volume Instru	ment	Color	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
McNair 235	1.02	81.0	21.5	63.8	9.4
McNair 220	1.02	82.0	22.5	66.5	9.6
Deltapine 55	1.03	81.5	21.5	69.8	9.4
Stoneville 213	1.02	81.5	22.0	63.5	10.0
Deltapine 41	1.00	82.0	22.0	67.5	10.0
Deltapine 61	1.04	82.5	23.0	68.5	9.3
Coker 8304	1.04	82.0	20.0	67.5	10.1
Coker 315	1.06	81.0	23.0	68.2	10.2
	1.08	83.5	23.5	67.2	9.7
Coker 470	1.00			69.2	10.3
	9.8	X I . ()			
Ga Cot 79	.98	81.0 81.5	22.5		
Ga Cot 79 Stoneville 506	1.06	81.5	22.0	64.5	9.8
Ga Cot 79	1.06 1.00	81.5 80.5	22.0 22.0	64.5 69.8	9.8 10.4
	1.06	81.5	22.0	64.5	9.8

Table 28. Eastern test: Seed data for Athens, Ga.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
. 1 07 5	10 1	2 70	0 / 5	10.7	r 0
Acala SJ-5	19.1	3.79	0.45	10.7	5.0
Coker 310	18.7	3.55	• 57	13.0	5.0
Coker 315	18.3	3.42	•59	13.4	5.5
Coker 420	18.9	3.42	• 73	10.5	4.0
Coker 8304	18.6	3.47	•50	13.4	5.0
Deltapine 41	17.1	3.61	• 54	7.8	5.0
Deltapine 55	17.5	3.43	•53	9.9	5.5
Deltapine 61	18.9	3.37	.50	13.0	5.0
Ga Cot 79	18.6	3.38	.48	11.6	6.5
McNair 235	18.8	3.52	• 43	16.6	6.5
McNair 220	19.0	3.35	•58	12.8	5.5
Paymaster 303	19.0	3.31	• 59	19.7	6.0
Stoneville 213	16.2	3.46	•50	14.8	4.5
Stoneville 506	18.2	3.46	• 44	16.4	5.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm²)	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
			·····		
Acala SJ-5	92.7	107.5	1.031	2.3	9.5
Coker 310	78.8	96.5	1.037	1.0	8.2
Coker 315	78.5	96.2	1.065	1.5	8.4
Coker 420	78.7	96.4	1.058	1.3	8.3
Coker 8304	77.7	95.5	1.056	1.8	8.2
Deltapine 41	72.5	91.3	1.034	2.0	7.7
Deltapine 55	83.5	99.0	. 998	1.8	8.2
Deltapine 61	81.1	98.4	1.035	2.0	8.4
Ga Cot 79	74.4	92.8	1.064	1.0	7.9
McNair 235	72.6	91.3	1.064	3.3	7.8
McNair 220	78.3	96.1	1.054	•0	8.3
Paymaster 303	77.7	95.5	1.038	.8	8.1
Stoneville 213	77.5	95.4	1.032	2.0	8.0
20011011110 213	,,,,	7,50	1,001	2.8	7.8

## DELTA REGIONAL COTTON VARIETY TEST

Table 29. Delta test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41 Stoneville 825N	973 a	4.39 e	41.2 a	9.4 e	148 bcde
	952 ab	4.86 d	38.0 c	10.8 c	143 efg
DES 56 Stoneville 213	935 abc	4.27 e	37.9 c	10.6 c	141 fg
	916 bc	5.02 cd	37.9 c	10.8 c	138 g
Deltapine 61  Deltapine 55  McNair 235	911 bc	5.22 bc	37.6 cd	10.6 c	144 defg
	899 cd	4.98 cd	38.8 b	10.0 d	145 cdef
	888 cd	4.44 e	37.7 cd	10.8 c	151 bcd
Coker 8304	855 de	5.42 ab	37.0 de	11.4 b	152 bc
	838 e	5.20 bc	36.7 ef	11.6 b	153 b
Paymaster 303 Acala SJ-5	681 f	5.59 a	36.1 f	12.6 a	140 fg
	639 f	5.40 ab	37.4 cde	12.5 a	176 a

Table 30. Delta test: Fiber data by cotton variety

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Deltapine 41	1.11 ab	0.52 bc	193 bcd	5.8 bcd	4.97 bc
Stoneville 825N	1.10 b	.50 cd	184 d	5.0 e	5.14 ab
DES 56	1.10 b	.52 bc	190 bcd	5.9 bc	4.89 cd
Stoneville 213	1.11 b	.51 bc	186 cd	6.0 Ъ	5.03 abc
Deltapine 61	1.12 ab	•52 Ъ	196 Ъ	6.6 a	5.16 a
Deltapine 55	1.11 b	.51 bc	187 cd	5.8 bcd	4.89 cd
McNair 235	1.10 b	.51 bc	198 Ъ	5.3 de	4.84 cd
Coker 8304	1.13 a	.52 bc	194 bc	5.5 cd	4.72 de
Coker 310	1.12 ab	.52 bc	196 Ъ	5.3 de	4.64 e
Paymaster 303	1.05 c	•48 d	186 cd	5.4 cd	4.61 e
Acala SJ-5	1.14 a	•55 a	236 a	5.5 cd	4.61 e
	Hig	h Volume Instru	ıment	Col	orimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Deltapine 41	1.14 abc	84.1 ab	23.6 bc	68.6 a	10.4 a
Stoneville 825N	1.13 bc	84.0 abc	22.7 c	69.1 a	10.1 a
DES 56	1.13 bc	83.9 abc	23.3 bc	68.6 a	10.4 a
Stoneville 213	1.12 c	83.4 bcd	23.1 bc	68.3 a	10.6 a
Deltapine 61	1.15 abc	84.3 a	22.7 c	70.0 a	10.2 a
Deltapine 55	1.14 abc	83.2 cd	23.1 bc	70.4 a	10.2 a
McNair 235	1.15 abc	84.0 abc	24.1 b	69.4 a	10.5 a
Coker 8304	1.16 ab	83.8 abc	23.9 bc	69.0 a	10.3 a
Coker 310	1.17 a	84.3 a	23.8 bc	69.1 a	10.2 a

23.6 bc

27.6 a

68.7 a

70.1 a

82.8 d

84.6 a

Paymaster 303 ....

Acala SJ-5 ......

1.07 d

1.15 abc

10.3 a

10.3 a

Table 31. Delta test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	16.9 g	3.48 c	0.70 ab	12.5 ab	5.1 a
Stoneville 825N	17.6 e	3.35 e	.74 ab	13.7 ab	4.3 b
DES 56	18.7 c	3.45 cd	•75 a	11.5 b	4.8 a
Stoneville 213 ····	17.2 fg	3.36 e	.70 b	14.4 a	3.8 c
Deltapine 61	18.1 d	3.38 de	•64 c	13.1 ab	5.0 a
Deltapine 55	17.5 ef	3.45 cd	.73 ab	12.7 ab	4.9 a
McNair 235	18.8 bc	3.42 cde	•72 ab	12.1 ab	4.9 a
Coker 8304	19.5 a	3.46 c	•74 ab	12.6 ab	4.4 b
Coker 310	19.2 ab	3.48 c	•74 ab	13.5 ab	4.3 b
Paymaster 303	19.0 bc	3.57 b	•58 d	13.3 ab	4.4 b
Acala SJ-5	19.4 a	3.64 a	•51 e	12.2 ab	4.4 b
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Deltapine 41 Stoneville 825N DES 56 Stoneville 213 Deltapine 61 Deltapine 55	90.4 d 101.4 bc 98.8 c 101.2 bc 100.3 c 94.0 d	105.7 d 114.0 bc 112.0 c 113.8 bc 113.2 c 108.4 d	0.912 f .921 def .938 cd .917 ef .920 ef .932 cde	1.2 d 3.8 a 2.1 bcd 2.7 abc 2.4 bcd 1.5 cd	8.3 e 9.4 c 9.3 c 9.3 c 9.3 c 8.7 d
McNair 235	101.5 bc	114.1 bc	•924 def	3.3 ab	9.4 c
Coker 8304	102.8 bc	114.9 bc	.966 a	2.2 bcd	9.8 ь
Coker 310	105.1 Ь	116.9 b	•966 a	2.1 bcd	10.1 Ь
Paymaster 303 Acala SJ-5	114.5 a 114.7 a	123.8 a 123.8 a	.942 bc .958 ab	3.6 a 2.8 abc	10.7 a 11.0 a

Table 32. Delta test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
St. Joseph, La	1495 a	5.12 ab	39.9 a	10.7 cd	144 c
Portageville, Mo	1005 Ъ	5.36 a	36.6 bc	11.2 bc	132 d
Marianna, Ark	996 Ъ	NA	39.5 a	10.9 c	146 c
Stoneville, Miss	888 c	4.80 cd	37.1 Ъ	10.6 cd	154 Ъ
Ridgely, Tenn	694 d	4.61 d	36.5 bc	11.4 b	162 a
Tunica, Miss	542 e	5.02 bc	39.4 a	10.5 d	142 c
Clarkedale, Ark	332 f	NA	36.0 c	11.8 a	157 ab

Table 33. Delta test: Fiber data by test location

Location	Digital F:	ibrograph		meter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Ch Iorach Io	1.11 c	0.52 c	189 b	5.8 a	4.68 d	
St. Joseph, La		•49 d	194 b	5.7 ab	4.63 d	
Portageville, Mo	1.11 bc		194 b	5.6 ab	5.42 a	
Marianna, Ark	1.09 d	•51 c	195 b	5.5 bc	4.61 d	
Stoneville, Miss	1.12 b	•53 ab	208 a	5.9 a	4.97 b	
Ridgely, Tenn	1.11 c	•52 bc				
Tunica, Miss	1.07 e	•50 d	187 b	5.3 c	4.91 bc	
Clarkedale, Ark	1.16 a	•54 a	197 Ь	5.7 ab	4.84 c	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$\frac{R_d}{R_d}$	Hunter's	
	(inches)	(percent)	(g/tex)	**a	b value	
	1 1/ 1	0/ 1 1	02 2 1	(0, 0, 1	10.7	
St. Joseph, La	1.14 bc	84.1 ab	23.3 b	69.0 ь	10.7 c	
Portageville, Mo	1.14 c	82.3 c	25.3 a	65.8 c	9.9 d	
Marianna, Ark	1.10 d	84.0 ab	23.0 bc	70.6 ab	11.2 ab	
Stoneville, Miss	1.14 bc	83.7 ь	23.7 ь	71.5 a	11.0 bc	
Ridgely, Tenn	1.15 b	84.6 a	25.7 a	71.8 a	11.3 a	
Tunica, Miss	1.08 e	83.6 b	22.1 c	66.2 c	8.7 e	
Clarkedale, Ark	1.19 a	84.5 a	23.4 b	69.5 b	9.6 d	

Table 34. Delta test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
St. Joseph, La Portageville, Mo Marianna, Ark Stoneville, Miss Ridgely, Tenn Tunica, Miss Clarkedale, Ark	19.5 a 18.1 b 18.2 b 18.1 b 17.9 b 17.3 c 19.5 a	3.28 e 3.53 b 3.52 b 3.38 d 3.44 c 3.74 a 3.31 e	0.82 a .78 b .65 d .66 d .54 f .61 e .74 c	13.4 bc 10.5 e 13.2 cd 15.2 a 11.8 de 15.0 ab 11.6 de	4.9 b 5.6 a 4.5 c 4.1 de 4.0 e 4.3 cd 4.5 c
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
St. Joseph, La Portageville, Mo Marianna, Ark Stoneville, Miss Ridgely, Tenn Tunica, Miss Clarkedale, Ark	101.1 cd 105.8 b 102.0 c 96.7 e 100.8 cd 97.6 de 111.7 a	113.8 cd 117.3 b 114.5 c 110.4 e 113.6 cd 111.1 de 121.6 a	0.917 d .958 a .928 bcd .934 bc .953 a .923 cd .939 b	3.0 b 4.5 a 1.8 c 2.7 bc 1.9 c 1.9 c 1.9 c	9.2 cd 10.2 b 9.5 c 9.0 d 9.6 c 9.1 d 10.6 a

Table 35. Delta test: Yield, boll and yarn tenacity data for St. Joseph, La.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1909 a	4.52	44.1	8.7	133
Deltapine 55	1788 ab	4.85	42.2	9.6	140
Stoneville 825N	1630 bc	4.96	39.2	11.0	136
DES 56	1617 bc	4.43	39.1	10.4	140
McNair 235	1580 cd	4.90	39.6	10.5	150
Deltapine 61	1508 cde	5.43	40.5	9.9	135
Stoneville 213	1508 cde	5.17	40.2	10.8	130
Coker 8304	1405 de	5.52	39.2	11.1	152
Coker 310	1382 e	5.86	38.2	11.2	153
Paymaster 303	1190 f	5.09	37.9	12.6	134
Acala SJ-5	928 g	5.59	39.2	11.9	176

Table 36. Delta test: Fiber data for St. Joseph, La.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Deltapine 41	1.10	0.51	182	5•6	4.7
Deltapine 55	1.10	•51	174	5.9	4.7
Stoneville 825N	1.11	•50	182	5.2	5.0
DES 56	1.10	•51	175	6.1	4.6
McNair 235	1.10	•53	210	5.4	4.6
Deltapine 61	1.10	•52	191	7.0	4.9
Stoneville 213	1.10	•51	172	6.6	5.0
Coker 8304	1.18	•56	196	5.6	4.4
Coker 310	1.15	•53	192	5.2	4.4
Paymaster 303	1.02	•46	184	5.5	4.6
Acala SJ-5	1.11	•54	218	5.6	4.6
Acaia 55 5	1 • 11	• 54	210	3.0	4.0
	Hig	High Volume Instrument			orimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
	1 12	02.5	22.0	69.0	11.1
laltanina /ll	1 1/	XYS	// -	N9.11	
_	1.12	83.5			
Deltapine 55	1.12	82.5	23.5	69.5	10.9
Deltapine 55 Stoneville 825N	1.12 1.16	82.5 84.0	23.5 21.0	69.5 69.8	10.9 10.4
Deltapine 55 Stoneville 825N DES 56	1.12 1.16 1.14	82.5 84.0 84.0	23.5 21.0 22.5	69.5 69.8 67.2	10.9 10.4 10.9
Deltapine 55 Stoneville 825N DES 56 McNair 235	1.12 1.16 1.14 1.16	82.5 84.0 84.0 85.0	23.5 21.0 22.5 25.5	69.5 69.8 67.2 67.2	10.9 10.4 10.9 11.5
Deltapine 55 Stoneville 825N DES 56 McNair 235 Deltapine 61	1.12 1.16 1.14 1.16 1.15	82.5 84.0 84.0 85.0 85.5	23.5 21.0 22.5 25.5 22.0	69.5 69.8 67.2 67.2	10.9 10.4 10.9 11.5 10.2
Deltapine 55 Stoneville 825N DES 56 McNair 235 Deltapine 61 Stoneville 213	1.12 1.16 1.14 1.16 1.15 1.12	82.5 84.0 84.0 85.0 85.5 84.0	23.5 21.0 22.5 25.5 22.0 20.5	69.5 69.8 67.2 67.2 67.8 69.8	10.9 10.4 10.9 11.5 10.2 11.2
Deltapine 55 Stoneville 825N DES 56 McNair 235 Deltapine 61 Stoneville 213 Coker 8304	1.12 1.16 1.14 1.16 1.15 1.12	82.5 84.0 84.0 85.0 85.5 84.0	23.5 21.0 22.5 25.5 22.0 20.5 24.5	69.5 69.8 67.2 67.2 67.8 69.8	10.9 10.4 10.9 11.5 10.2 11.2 9.9
Deltapine 41 Deltapine 55 Stoneville 825N DES 56 McNair 235 Deltapine 61 Stoneville 213 Coker 8304 Paymaster 303	1.12 1.16 1.14 1.16 1.15 1.12	82.5 84.0 84.0 85.0 85.5 84.0	23.5 21.0 22.5 25.5 22.0 20.5	69.5 69.8 67.2 67.2 67.8 69.8	10.9 10.4 10.9 11.5 10.2 11.2

Table 37. Delta test: Seed data for St. Joseph, La.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	17.2	3.30	0.87	12.1	5.5
Deltapine 55	18.9	3.21	•90	12.9	4.5
Stoneville 825N	18.6	3.20	•95	15.1	4.5
DES 56	19.5	3.33	•92	14.4	5.0
McNair 235	20.0	3.16	•80	14.2	5.0
Deltapine 61	19.0	3.13	•79	15.8	5.0
Stoneville 213	18.2	3.14	.84	14.8	4.0
Coker 8304	20.5	3.33	•88	12.2	5.0
Coker 310	20.5	3.29	•87	13.2	5.0
Paymaster 303	20.5	3.38	•65	12.3	5.0
Acala SJ-5	20.2	3.61	•57	10.9	5.0
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Deltapine 41	88.1	103.9	0.905	0.5	8.0
Deltapine 55	90.9	106.1	•931	2.0	8.5
Stoneville 825N	103.1	115.4	•905	5.3	9.3
DES 56	95.3	109.5	•901	2.0	8.6
McNair 235	102.3	114.8	•873	6.5	8.9
Deltapine 61	96.3	110.3	.885	2.3	8.5
Stoneville 213	100.4	113.4	•907	5.0	9.1
Coker 8304	100.7	112.6	•960	.8	9.2
Coker 310	102.7	115.1	•948	2.8	9.7
LOKEE 31U					
Paymaster 303	119.0	127.9	•939	3.0	10.7

Table 38. Delta test: Yield, boll and yarn tenacity data for Marianna, Ark.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 41	1225 a	NA	42.6	9.4	149
Stoneville 825N	1187 ab	NA	41.9	10.3	132
Deltapine 61	1142 abc	NA	40.2	10.7	150
McNair 235	1060 abc	NA	39.7	10.6	141
Coker 8304	1054 abc	NA	37.9	11.5	158
DES 56	957 abcd	NA	39.8	10.8	136
Stoneville 213	949 abcd	NA	39.3	10.5	138
Deltapine 55	924 abcd	NA	39.8	10.2	146
Paymaster 303	877 bcd	NA	36.8	12.1	138
Coker 310	858 cd	NA	38.1	11.7	156
Acala SJ-5	729 d	NA	38.4	12.5	164

Table 39. Delta test: Fiber data for Marianna, Ark.

ariety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
eltapine 41	1.08	0.52	197	5.4	5.60
Stoneville 825N	1.05	•48	181	5.0	5.95
eltapine 61	1.12	• 55	201	7.4	5.65
IcNair 235	1.08	•51	198	5.6	5.55
oker 8304	1.16	•55	191	5.4	5.50
ES 56	1.08	•51	192	6.2	5.60
toneville 213	1.06	• 50	186	6.0	5.70
eltapine 55	1.10	•51	197	5.4	5.45
aymaster 303	1.04	•47	188	5.3	4.70
oker 310	1.09	•50	188	5.4	5.10
cala SJ-5	1.12	•56	240	5.4	4.85
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)	u	b value
eltapine 41	1.10	84.5	24.0	65.5	10.9
coneville 825N	1.06	84.0	21.5	70.2	11.8
eltapine 61	1.12	85.5	21.5	71.0	11.0
Nair 235	1.14	83.5	23.5	70.8	11.3
oker 8304	1.15	84.0	22.5	73.2	11.4
ES 56	1.08	84.0	21.5	70.2	11.4
toneville 213	1.00	83.0	22.5	66.2	11.8
eltapine 55 ·····	1.11	83.5	23.0	73.2	10.6
aymaster 303	1.06	82.5	22.5	71.2	11.0
AVIIIASTEL TUT AAAAA			23.5	73.0	11.0
	1 17				
oker 310	1.17 1.13	84.5 85.0	26.5	72.2	11.3

Table 40. Delta test: Seed data for Marianna, Ark.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	17.2	3.48	0.72	12.4	5.0
Stoneville 825N	17.5	3.43	•72	10.9	4.5
Deltapine 61	18.1	3.48	•65	11.2	5.0
McNair 235	18.3	3.57	.75	10.6	5.0
Coker 8304	20.1	3.29	•79	14.0	4.0
DES 56	18.5	3.59	•69	10.5	4.5
Stoneville 213	16.3	3.48	•55	14.8	4.0
Deltapine 55	17.6	3.52	.74	13.1	5.0
Paymaster 303	18.5	3.65	.49	12.8	3.5
Coker 310	18.7	3.47	. 67	14.9	4.0
Acala SJ-5	19.8	3.78	•44	19.3	4.5
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Deltapine 41	94.1	108.6	0.899	0.8	8.5
Stoneville 825N	100.8	113.6	•909	2.0	9.2
Deltapine 61	102.8	115.2	•923	.8	9.5
McNair 235	101.5	114.2	.931	1.0	9.5
Coker 8304	104.5	116.4	•942	4.0	9.8
DES 56	105.1	116.9	.923	1.3	9.7
Stoneville 213	100.5	113.4	.887	2.0	8.9
Deltapine 55	96.8	110.6	.911	•3	8.8
Paymaster 303	111.2	121.3	•946	2.5	10.5
Coker 310	101.9	114.5	.973	2.5	9.9
Acala SJ-5	103.1	115.1	•969	2.3	10.1

Table 41. Delta test: Yield, boll and yarn tenacity data for Portageville, Mo.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1136 a	5.70	36.2	11.9	120
Stoneville 825N	1088 ab	4.90	36.9	11.0	142
Stoneville 213	1072 ab	5.30	36.1	11.0	134
Deltapine 41	1072 ab	4.70	39.0	9.5	134
Coker 8304	1067 ab	5.80	36.5	11.2	133
Deltapine 61	1056 abc	5.45	35.3	10.9	128
DES 56	998 bcd	4.50	36.7	10.4	123
Deltapine 55	971 cd	5.15	36.5	10.1	132
McNair 235	919 de	4.90	36.1	11.3	138
Acala SJ-5	840 ef	6.30	38.1	12.6	150
Paymaster 303	832 f	6.25	35.2	13.0	124

Table 42. Delta test: Fiber data for Portageville, Mo.

Variety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
Coker 310	1.06	0.46	194	5.3	4.45
Stoneville 825N	1.10	•50	186	4.8	4.85
Stoneville 213	1.15	•48	200	5.5	4.45
Deltapine 41	1.14	•50	192	7.4	4.85
Coker 8304	1.12	•50	178	5.8	4.30
Deltapine 61	1.09	•46	172	4.8	4.85
DES 56	1.12	•51	194	6.1	4.75
Deltapine 55	1.12	•50	196	5.9	4.75
McNair 235	1.11	•48	194	5.4	4.40
Acala SJ-5	1.13	•50	230	5.5	4.55
Paymaster 303	1.10	.49	193	6.0	4.75
	High	High Volume Instrument			rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)	~ 	b value
Coker 310	1.09	82.0	25.0	64.2	10.6
Stoneville 825N	1.13	83.5	23.5	62.5	10.3
Stoneville 213	1.16	81.0	25.0	67.5	9.9
Deltapine 41	1.18	84.0	26.0	65.5	9.7
Coker 8304	1.16	81.0	25.0	68.2	9.6
Deltapine 61	1.12	81.5	25.0	67.5	9.5
DES 56	1.15	83.5	26.0	64.0	10.3
Deltapine 55	1.14	82.5	25.0	66.8	9.8
McNair 235	1.13	81.5	24.5	66.0	9.4
Acala SJ-5	1.17	83.0	28.5	63.8	10.3

Table 43. Delta test: Seed data for Portageville, Mo.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
0.1 - 210	10 (	2.50	0.91	10.0	F
Coker 310	18.6 17.4	3.59	.89	10.9 12.0	5.5
Stoneville 825N		3.39			5.0
Stoneville 213	17.5	3.41	.82	13.4	5.0
Deltapine 41	16.7	3.54	.78	10.1	6.0
Coker 8304	19.1	3.55	.76	10.7	5.5
Deltapine 61	17.4	3.45	.71	11.5	6.0
DES 56	18.6	3.56	.88	9.2	5.5
Deltapine 55	17.3	3.52	.78	9.0	5.5
McNair 235	18.8	3.51	<b>.</b> 75	9.8	5.5
Acala SJ-5	19.8	3.73	•58	8.4	6.0
Paymaster 303	18.5	3.59	.76	10.3	6.0
	Seed volume	Seed surface	Seed density	Floaters (percent)	Acid- delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )	(Foresta,	seed index
0.1 - 210	110 /	100.0	0.000	/ 0	11 1
Coker 310	112.4	122.2	0.988	4.8	11.1
Stoneville 825N	104.0	116.1	•954	6.3	10.2
Stoneville 213	102.3	114.8	.972	4.3	9.9
Deltapine 41	93.4	108.0	.932	1.8	8.7
Coker 8304	99.9	113.0	.980	5.0	9.8
Deltapine 61	103.5	115.7	.919	6.5	9.7
DES 56	102.2	114.7	.963	3.3	10.1
Deltapine 55	99.3	112.5	•958	3.3	9.2
McNair 235	105.8	117.4	•952	6.0	10.1
Acala SJ-5	122.0	129.1	•980	2.8	11.9
Paymaster 303	119.5	127.3	•946	6.3	11.3

Table 44. Delta test: Yield, boll and yarn tenacity data for Stoneville, Miss.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
DES 56	1040 a	4.54	37.4	10.1	152
Deltapine 61	998 ab	4.96	37.0	10.7	153
McNair 235	993 ab	4.62	36.7	10.5	159
Stoneville 213	982 ab	4.59	37.5	10.6	144
Stoneville 825N	968 ab	4.68	36.2	10.5	142
Deltapine 41	955 ab	4.30	41.2	8.8	148
Deltapine 55	908 bc	4.77	38.1	9.7	150
Coker 8304	848 cd	4.77	36.5	11.0	160
Coker 310	776 d	5.11	35.2	11.3	157
Acala SJ-5	655 e	5.19	37.1	11.5	186
Paymaster 303	648 e	5.34	35.4	11.9	146

Table 45. Delta test: Fiber data for Stoneville, Miss.

Variety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
DES 56	1.12	0.52	192	5.7	4.60
Deltapine 61	1.16	•56	198	6.6	5.10
CNair 235	1.12	•53	203	5.0	4.55
Stoneville 213	1.12	•54	186	5.8	5.00
toneville 825N	1.10	•50	184	4.9	4.90
eltapine 41	1.12	•54	188	5.3	4.60
eltapine 55	1.13	•52	174	6.0	4.60
oker 8304	1.14	•52	198	5.2	4.55
oker 310	1.14	• 54	201	5.2	4.35
cala SJ-5	1.15	•56	240	5.4	4.20
aymaster 303	1.04	•48	184	5.4	4.30
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
TC 54	1 17	8/1 0	23 0	71 Ω	11 2
	1.17	84.0	23.0	71 •8	11.2
eltapine 61	1.16	84.5	21.0	72.8	11.3
eltapine 61 cNair 235	1.16 1.14	84.5 84.0	21.0 24.5	72.8 72.2	11.3 10.7
eltapine 61 cNair 235 toneville 213	1.16 1.14 1.14	84.5 84.0 83.5	21.0 24.5 24.0	72.8 72.2 68.2	11.3 10.7 11.3
eltapine 61 cNair 235 toneville 213 toneville 825N	1.16 1.14 1.14 1.16	84.5 84.0 83.5 84.0	21.0 24.5 24.0 25.0	72.8 72.2 68.2 73.5	11.3 10.7 11.3 10.5
eltapine 61 cNair 235 toneville 213 toneville 825N eltapine 41	1.16 1.14 1.14 1.16 1.12	84.5 84.0 83.5 84.0 83.5	21.0 24.5 24.0 25.0 23.0	72.8 72.2 68.2 73.5 72.0	11.3 10.7 11.3 10.5 11.3
eltapine 61 cNair 235 toneville 213 toneville 825N eltapine 41 eltapine 55	1.16 1.14 1.14 1.16 1.12 1.17	84.5 84.0 83.5 84.0 83.5 83.0	21.0 24.5 24.0 25.0 23.0 23.5	72.8 72.2 68.2 73.5 72.0 73.2	11.3 10.7 11.3 10.5 11.3 10.9
eltapine 61 cNair 235 toneville 213 toneville 825N eltapine 41 eltapine 55 oker 8304	1.16 1.14 1.14 1.16 1.12 1.17	84.5 84.0 83.5 84.0 83.5 83.0	21.0 24.5 24.0 25.0 23.0 23.5 24.5	72.8 72.2 68.2 73.5 72.0 73.2 72.2	11.3 10.7 11.3 10.5 11.3 10.9
eltapine 61  conair 235  toneville 213  toneville 825N  eltapine 41  coker 8304  coker 310  cotala SJ-5	1.16 1.14 1.14 1.16 1.12 1.17	84.5 84.0 83.5 84.0 83.5 83.0	21.0 24.5 24.0 25.0 23.0 23.5	72.8 72.2 68.2 73.5 72.0 73.2	11.3 10.7 11.3 10.5 11.3 10.9

Table 46. Delta test: Seed data for Stoneville, Miss.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
DES 56	18.5	3.32	0.72	9.8	4.5
Deltapine 61	18.2	3.25	•60	16.3	4.5
McNair 235	17.8	3.37	•69	15.0	5.0
Stoneville 213	16.4	3.30	•65	17.7	3.5
Stoneville 825N	17.8	3.22	.69	17.4	4.0
Deltapine 41	16.7	3.47	•66	15.4	4.5
Deltapine 55	17.1	3.40	•74	16.9	4.0
Coker 8304	20.1	3.28	.79	16.1	3.0
Coker 310	19.1	3.49	•72	15.2	4.0
Acala SJ-5	19.1	3.62	.49	13.6	4.0
Paymaster 303	18.8	3.55	•55	13.8	4.0
	Seed	Seed	Seed	Floaters	Acid-
	vo lume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
DES 56	92.5	107.0	0.966	3.5	8.9
Deltapine 61	98.3	111.8	•923	1.0	9.1
McNair 235	96.1	110.1	•931	3.3	8.9
Stoneville 213	95.1	109.3	•902	3.5	8.6
Stoneville 825N	96.4	110.4	.926	2.8	9.2
Deltapine 41	79.7	97.2	•917	1.8	7.3
Deltapine 55	88.6	104.3	•935	2.3	8.3
Coker 8304	94.9	109.2	•984	•5	9.3
Coker 310	99.1	112.4	•952	1.3	9.4
Acala SJ-5	110.4	120.7	.923	5.0	10.1
Paymaster 303	112.3	122.1	.913	4.5	10.3

Table 47. Delta test: Yield, boll and yarn tenacity data for Ridgely, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	770 a	5.20	37.6	10.9	146
Stoneville 825N	762 ab	5.20	36.4	10.5	170
Coker 310	729 abc	3.70	35.6	12.6	168
Deltapine 41	728 abc	3.96	39.7	10.1	166
McNair 235	726 abc	3.07	37.0	11.5	168
DES 56	712 abc	3.27	36.8	11.2	153
Deltapine 55	711 abc	5.38	35.4	10.4	154
Coker 8304	661 bcd	5.61	36.9	11.8	158
Deltapine 61	636 cd	5.20	35.4	10.6	153
Paymaster 303	607 d	6.15	35.8	12.4	154
Acala SJ-5	591 d	4.04	35.4	13.4	192

Table 48. Delta test: Fiber data for Ridgely, Tenn.

Variety	Digital F	ibrograph	Stelometer Stelometer		Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Stoneville 213	1.10	0.52	188	6.1	5.15
Stoneville 825N	1.08	•50	192	5.0	5.20
Coker 310	1.14	•54	202	5.6	5.00
eltapine 41	1.13	•54	206	6.0	4.95
icNair 235	1.10	•50	204	5.4	5.00
DES 56	1.11	•53	203	6.0	5.00
	1.10	•50	200	6.0	
Deltapine 55					4.95
Coker 8304	1.12	•52	210	5.7	4.80
Deltapine 61	1.11	•52	222	7.6	5.25
Paymaster 303	1.06	•50	198	5.7	4.70
Acala SJ-5	1.13	• 54	256	5.8	4 • 65
	Hig	High Volume Instrument			rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)	~	b value
Stoneville 213	1.11	- 83.5	24.0	72.0	11.2
Stoneville 825N	1.14	84.5	25.0	70.0	11.3
Coker 310	1.14	85.0	25.5	72.8	11.4
			26.0	70.0	11.4
Deltapine 41	1.18 1.18	85.5 85.5	26.0	75.0	11 • <del>4</del>
Cair 235	1.17	X 7 . 7	∠n • U	/ 3 a U	
NEC EC					11.7
	1.16	85.5	25.5	72.5	11.7 11.4
Deltapine 55	1.16 1.18	85.5 84.0	25.5 24.0	72.5 73.0	11.7 11.4 11.0
Deltapine 55 Coker 8304	1.16 1.18 1.19	85.5 84.0 86.0	25.5 24.0 25.5	72.5 73.0 69.5	11.7 11.4 11.0 11.2
Deltapine 55  Coker 8304  Deltapine 61	1.16 1.18 1.19 1.14	85.5 84.0 86.0 84.5	25.5 24.0 25.5 25.0	72.5 73.0 69.5 73.2	11.7 11.4 11.0 11.2 10.5
DES 56 Deltapine 55 Coker 8304 Deltapine 61 Paymaster 303 Acala SJ-5	1.16 1.18 1.19	85.5 84.0 86.0	25.5 24.0 25.5	72.5 73.0 69.5	11.7 11.4 11.0 11.2

Table 49. Delta test: Seed data for Ridgely, Tenn.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	16.6	3.36	0.52	13.6	3.0
Stoneville 825N	16.9	3.33	• 47	12.5	4.0
Coker 310	19.0	3.60	•63	12.1	3.5
Deltapine 41	16.9	3.54	• 54	11.4	4.5
McNair 235	18.9	3.37	•60	11.6	4.5
DES 56	18.1	3.43	• 58	11.4	4.5
Deltapine 55	17.3	3.44	•61	11.2	5.0
Coker 8304 ·····	18.5	3.49	• 64	10.9	4.0
Deltapine 61	18.0	3.37	•47	11.9	4.5
Paymaster 303	18.9	3.51	•49	11.7	4.0
Acalá SJ-5 ·····	18.3	3.43	•45	11.2	3.0
	10.0	34 13	V 13	,	3.0
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
		area (mm )	(g/сш )		seeu Index
Stoneville 213	95.5	109.6	0.942	1.8	9.0
Stoneville 825N	95.8	109.9	•933	2.3	9.0
Coker 310	110.0	120.4	•984	1.3	10.3
Deltapine 41	92.2	107.1	• 924	•8	8.5
McNair 235	100.4	113.3	•951	1.8	9.5
DES 56	98.9	112.2	•935	1.5	9.5
Deltapine 55	92.3	107.2	•948	•8	8.7
Coker 8304	100.8	113.6	• 984	1.5	9.9
Deltapine 61	94.4	108.8	•955	2.3	9.3
Paymaster 303	113.4	123.3	•957	3.0	10.7
Acala SJ-5	115.3	124.3	.971	4.3	10.7

Table 50. Delta test: Yield, boll and yarn tenacity data for Tunica, Miss.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 825N	662 a	4.58	40.1	10.2	130
Stoneville 213	627 ab	4.85	39.6	10.2	131
DES 56	609 abc	4.64	39.4	10.1	135
Deltapine 61	585 abc	5.09	38 • 8	10.4	142
Coker 8304	560 abc	5.40	38.3	11.4	147
Deltapine 41	559 abc	4.48	42.2	9.3	144
Deltapine 55	552 abc	4.74	41.3	9.3	136
Coker 310	527 bc	5.66	37.6	10.6	148
McNair 235	494 cd	4.72	39.3	9.9	139
Acala SJ-5	404 de	5.90	38 • 6	12.2	176
Paymaster 303	382 e	5.14	38.1	11.7	133

Table 51. Delta test: Fiber data for Tunica, Miss.

Stelometer

Micronaire

Digital Fibrograph

Variety

	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Stoneville 825N	1.06	0.49	174	5.0	5.15	
Stoneville 213	1.06	•49	186	5.8	5.00	
DES 56	1.06	•50	187	5.4	5.00	
Deltapine 61	1.08	•50	190	6.0	5.30	
Coker 8304	1.08	•50	190	5.5	4.80	
Deltapine 41	1.06	•50	182	5.1	5.00	
Deltapine 55	1.06	•47	180	5.2	4.90	
Coker 310	1.10	•52	193	5.3	4.45	
McNair 235	1.04	•50	179	4.9	4.95	
Acala SJ-5	1.10	•55	228	5.1	4.80	
Paymaster 303	1.02	•48	170	5.0	4.65	
	2 • 02					
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$\overline{R}_d$	Hunter's	
	(inches)	(percent)	(g/tex)		<i>b</i> value	
Stoneville 825N	1.07	83.0	21.5	65.0	7.4	
Stoneville 213	1.10	84.0	22.0	64.8	9.1	
DES 56	1.04	83.0	22.0	64.8	8.6	
Deltapine 61	1.08	84.0	22.0	66.8	9.0	
Coker 8304	1.11	83.5	21.5	66.2	9.2	
Deltapine 41	1.07	83.0	22.0	69.8	8.8	
Deltapine 55	1.07	83.0	20.5	67.2	8.3	
Coker 310	1.14	85.0	23.0	65.8	8.7	
McNair 235	1.06	83.0	21.5	65.0	9.3	
Acala SJ-5	1.12	85.0	26.5	69.5	8.2	
Paymaster 303	1.02	83.5	21.0	64.0	9.0	

Table 52. Delta test: Seed data for Tunica, Miss.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
0. 11 025N	16.6	3.62	0.61	15.7	4.0
Stoneville 825N Stoneville 213	16.6 16.1	3.63	.71	16.0	3.0
	17.4	3.72	.60	15.0	5.0
DES 56		3.80	•60	13.4	5.0
Deltapine 61	17.6		-		•
Coker 8304	18.5	3.77	.61	12.7	4.5
Deltapine 41	16.2	3.77	•64	15.3	5.0
Deltapine 55	16.1	3.74	•58	15.4	5.0
Coker 310	17.8	3.78	•65	14.8	4.0
McNair 235	17.8	3.79	•66	13.3	4.5
Acala SJ-5	18.4	3.80	• 48	12.4	4.0
Paymaster 303	18.0	3.77	•58	14.2	3.5
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Stoneville 825N	95.3	109.5	0.903	4.0	8.6
Stoneville 213	92.2	107.1	.883	1.5	8.1
DES 56	92.0	106.9	•003 •942	1.8	8.7
Deltapine 61	99.0	112.3	.919	1.3	9.1
Coker 8304	105.5	117.2	•960	2.0	10.1
Deltapine 41	85.8	102.1	.899	1.8	7.7
Deltapine 55	89.2	104.8	•909	•5	8.1
Coker 310	102.5	115.0	.959	1.3	9.8
McNair 235	91.2	106.3	.914	1.8	8.8
Acala SJ-5	114.7	123.9	•943	1.0	10.8
Paymaster 303	105.9	117.5	•926	3.8	9.8

Table 53. Delta test: Yield, boll and yarn tenacity data for Clarkedale, Ark.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
DES 56	496 a	NA	36.1	11.1	147
McNair 235	445 ab	NA	35.8	11.6	164
Deltapine 61	393 abc	NA	35.8	11.4	150
Deltapine 41	391 abc	NA	39.9	10.2	160
Coker 8304	324 bcd	NA	34.2	12.2	153
Coker 310	321 bcd	NA	36.1	11.9	167
Deltapine 55	314 bcd	NA	38.5	10.6	156
Stoneville 213	269 cd	NA	35.2	11.7	138
Paymaster 303	237 d	NA	33.9	14.2	148
Stoneville 825N	233 d	NA	35.2	12.0	150
Acala SJ-5	226 d	NA ·	35.3	13.6	192

Variety

Table 54. Delta test: Fiber data for Clarkedale, Ark.

Stelometer

Micronaire

Digital Fibrograph

	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading		
DES 56	1 12	0.52	1.00	. E 0	/. <i>(</i>		
McNair 235	1.13 1.17	0.52 .56	190 198	. 5.8	4.65		
				5.4	4.80		
Deltapine 61	1.18	•56	200	6.8	5.05		
Deltapine 41	1.16	.54	202	5.6	5.10		
Coker 8304	1.14	•51	193	5.4	4.75		
Coker 310	1.18	•54	200	5.4	4.70		
Deltapine 55	1.14	•53	184	5.9	4.90		
Stoneville 213	1.16	•54	182	6.4	5.00		
Paymaster 303	1.08	•51	186	5.4	4.65		
Stoneville 825N	1.17	•54	188	4.9	5.00		
Acala SJ-5	1.20	•60	242	5.6	4.60		
	High	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's		
	(inches)	(percent)	(g/tex)	w 	b value		
DES 56	1.17	83.5	22.5	70.0	9.4		
McNair 235	1.21	85.5	23.0	69.8	9.7		
Deltapine 61	1.24	84.5	22.5	71.5	10.1		
Deltapine 41	1.20	85.0	22.0	68.2	10.0		
Coker 8304	1.15	84.0	24.0	64.5	9.7		
Coker 310	1.23	84.5	23.5	70.0	9.4		
Deltapine 55	1.18	84.0	22.5	70.0	10.1		
Stoneville 213	1.19	84.5	23.5	69.5	10.1		
Paymaster 303	1.11	84.0	24.0	66.5	9.3		
Stoneville 825N	1.20	85.0	21.5	72.8	9.0		
Acala SJ-5	1.23	85.5	28.0	72.0	8.8		

Table 55. Delta test: Seed data for Clarkedale, Ark.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
DES 56	20.8	3.19	0.88	10.2	4.5
McNair 235	20.4	3.19	.78	10.4	4.5
Deltapine 61	18.4	3.20	•64	11.6	5.0
Deltapine 41	17.4	3.31	•72	10.7	5.0
Coker 8304 ·····	19.7	3.52	•74	11.3	4.5
Coker 310 ·····	20.6	3.15	•78	13.0	4.0
Deltapine 55	18.3	3.32	•77	10.6	5.0
Stoneville 213 ····	19.3	3.21	• 80	10.1	4.0
Paymaster 303	20.2	3.53	•59	18.2	4.5
Stoneville 825N	18.8	3.30	• 86	12.2	4.0
Acala SJ-5	20.6	3.52	.60	9.6	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm²)	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
DES 56	105.5	117.1	0.939	1.8	9.9
McNair 235	113.6	123.1	.915	2.8	10.4
Deltapine 61	107.6	118.7	.919	2.5	9.9
Deltapine 41	99.8	112.9	.912	1.3	9.1
Coker 8304	113.1	122.7	•952	1.5	10.8
Coker 310	107.6	118.7	•962	1.0	10.6
Deltapine 55	100.8	113.7	•934	1.5	9.7
Stoneville 213	122.4	129.2	•925	1.0	11.3
Paymaster 303	120.0	127.5	•972	2.3	11.6
Stoneville 825N	114.2	123.5	•922	4.3	10.5
Acala SJ-5	124.6	131.0	•984	1.5	12.5

## CENTRAL REGIONAL COTTON VARIETY TEST

Table 56. Central test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
McNair 220	809 a	5.04 ab	36.8 bc	10.1 bc	151 ъ
Stoneville 825N	789 ab	4.95 b	37.1 b	10.0 cd	135 d
McNair 235	785 ab	4.98 ъ	37.1 ъ	9.8 cde	152 ъ
Deltapine 55	761 ab	4.48 c	38.7 a	9.5 de	145 bc
Deltapine 61	745 ab	4.97 ъ	37.1 ь	9.3 e	145 bc
Stoneville 256	732 ab	5.03 ab	37•5 b	9.8 cde	137 cd
Stoneville 213	711 ь	4.63 c	37.2 b	10.1 bc	140 cd
Coker 310	705 Ъ	5.12 ab	36.0 cd	10.5 b	153 ъ
Paymaster 303	580 с	5.26 ab	35.0 e	11.2 a	135 d
Acala SJ-5	518 c	5.34 a	35.5 de	11.6 a	188 a

Table 57. Central test: Fiber data by cotton variety

Stelometer

Micronaire

Digital Fibrograph

Variety

	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
McNair 220	1.05 b	0.50 bc	200 Ъ.	5.4 cd	4.44 bc
Stoneville 825N	1.06 b	.49 cd	179 e	5.1 de	5.04 a
McNair 235	1.07 b	.50 bc	198 Ъ	5.4 cd	4.41 bc
Deltapine 55	1.07 b	.50 bc	182 de	5.5 c	4.60 b
Deltapine 61	1.07 b	.52 bc	196 bc	6.6 a	4.91 a
Stoneville 256	1.07 b	.50 bc	177 e	4.9 e	4.96 a
Stoneville 213	1.06 b	•51 bc	188 bcde	5.9 b	4.89 a
Coker 310	1.10 a	.52 b	192 bcd	5.4 cd	4.42 bc
Paymaster 303	1.02 c	.48 d	184 cde	5.4 cd	4.21 c
Acala SJ-5	1.12 a	•56 a	236 a	5.3 cd	4.49 bc
	High	h Volume Instru	Colorimeter		
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
McNair 220	1.08 bc	83.6 ъ	23.2 b	66.6 bcd	10.9 a
Stoneville 825N	1.08 bc	83.5 b	21.8 bc	68.9 ab	10.6 a
McNair 235	1.00 bc	84.4 ab	23.0 b	66.8 bcd	10.9 a
Deltapine 55	1.07 c	83.4 b	22.5 bc	68.7 abc	10.7 a
Deltapine 61	1.09 abc	84.0 ъ	21.8 bc	68.3 abcd	11.1 a
Stoneville 256	1.10 abc	83.9 b	21.1 c	68.4 abcd	10.4 a
Stoneville 213	1.08 bc	84.2 ab	22.4 bc	66.0 d	11.1 a
Coker 310	1.12 ab	83.5 b	23.1 b	67.8 abcd	11.1 a
	T + T Z GD		23.1	o, to about	
Paymaster 303	1.02 d	82.0 c	21.6 bc	66.1 cd	11.0 a

Table 58. Central test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220 Stoneville 825N McNair 235 Deltapine 55 Deltapine 61 Stoneville 256 Stoneville 213 Coker 310 Paymaster 303 Acala SJ-5	18.7 ab 17.9 cd 18.4 bc 17.9 cd 18.3 bc 17.6 de 17.2 e 18.8 ab 18.7 ab 19.2 a	3.29 b 3.25 b 3.29 b 3.29 b 3.15 b 3.37 ab 3.37 ab 3.30 b 3.34 ab 3.54 a	0.78 a .84 a .83 a .81 a .83 a .83 a .93 a .72 a .71 a .51 b	12.3 cd 15.0 a 12.5 c 12.3 cd 13.7 b 13.0 bc 15.2 a 13.2 bc 13.0 bc 11.5 d	5.6 a 5.3 ab 5.5 a 5.4 a 5.4 a 5.1 abc 4.3 d 4.6 cd 4.8 bcd 4.4 d
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
McNair 220 Stoneville 825N McNair 235 Deltapine 55 Deltapine 61 Stoneville 256 Stoneville 213 Coker 310 Paymaster 303 Acala SJ-5	102.7 b 97.2 c 103.3 b 92.1 c 95.5 c 94.3 c 95.4 c 102.0 b 110.4 a 114.9 a	115.6 b 110.9 c 115.5 b 107.0 c 109.6 c 108.7 c 109.5 c 114.6 b 120.7 a 124.0 a	0.880 bcd .896 abc .858 d .877 cd .879 bcd .905 ab .891 abc .904 ab .902 abc .912 a	2.4 a 1.9 a 2.6 a 1.4 a 1.3 a 2.5 a 1.6 a 1.5 a 2.6 a 3.0 a	9.1 cd 8.7 def 8.9 cde 8.1 g 8.3 fg 8.6 ef 8.6 ef 9.2 c 10.0 b 10.5 a

Table 59. Central test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Bossier City, La College Station,	1146 a	4.94 ab	39.9 a	10.6 a	145 в
Tex	957 ъ	4.68 Ъ	37.5 Ъ	10.3 a	156 a
Weslaco, Tex	565 c	5.03 ab	32.2 c	10.9 a	153 a
Nueces County, Tex.	185 d	5.27 a	37.5 ъ	8.9 ь	138 c

Table 60. Central test: Fiber data by test location

Location	Digital Fibrograph		Stelo	Micronaire		
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading	
	(inches)	(inches)	(mN/tex)	(percent)		
Bossier City, La College Station,	l.ll a	0.51 ъ	200 a	5.6 ab	5.05 a	
	1.10 a	•52 a	196 Ъ	5.4 bc	4.64 b	
Weslaco, Tex	1.08 a	•52 a	198 ab	5.7 a	4.55 Ъ	
Nueces County, Tex.	1.00 ъ	.47 c	177 c	5.3 c	4.30 c	
	High	n Volume Instru	ment	ent Colo		
	UHM	Uniformity	Tenacity	$\overline{R_A}$	Hunter's	
	(inches)	(percent)	(g/tex)	<u> </u>	b value	
Bossier City, La	1.14 a	83.8 b	23.0 ab	69.0 b	10.7 Ъ	
College Station,	1•14 a	03.0	23.0 ab	09.0	10.7 0	
	1.11 a	84.2 ab	24.0 a	66.0 c	11.5 a	
	1.08 a	84.3 a	22.4 ab	71.1 a	11.1 ab	
•	1.01 Ъ	82 • 8 c	21.6 Ъ	64.7 c	10.1 c	

Table 61. Central test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Bossier City, La College Station,	18.8 a	3.53 a	1.07 a	11.8 c	5.7 a
Tex	18.9 a	3.16 c	•83 Ъ	13.6 ab	5.2 Ъ
Weslaco, Tex	18.0 Ъ	3.33 b	•65 c	14.0 a	4.1 c
Nueces County, Tex.	17.3 c	3.26 bc	•57 c	13.3 b	5.2 b
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Bossier City, La College Station,	99.4 ъ	112.7 Ъ	0.946 a	1.2 b	9.4 a
Tex	99.8 ъ	112.8 ъ	•906 ъ	2.1 ab	9.1 b
Weslaco, Tex	106.8 a	118.0 a	•900 ъ	3.0 a	9.6 a
Nueces County, Tex.	97.2 Ъ	110.9 Ъ	.809 c	2.0 ab	7.9 c

Table 62. Central test: Yield, boll and yarn tenacity data for Bossier City, La.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 825N	1294 a	4.88	40.1	10.8	126
McNair 220	1285 a	4.59	39.6	10.4	150
Deltapine 61	1268 a	4.85	40.5	9.6	140
Stoneville 213	1245 a	4.93	40.4	10.6	136
Deltapine 55	1205 a	4.90	41.8	10.0	142
McNair 235	1165 ab	4.48	40.2	10.1	153
Stoneville 256	1136 ab	4.75	40.3	10.5	130
Coker 310	1007 bc	5.35	38.9	11.2	158
Paymaster 303	963 c	5.34	39.7	11.4	140
Acala SJ-5	901 c	5.35	37 • 8	12.5	178

Table 63. Central test: Fiber data for Bossier City, La.

Variety	Digital Fibrograph		Stelometer		Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Stoneville 825N	1.10	0.48	192	5.2	5.55	
McNair 220	1.10	•52	204	5.6	4.95	
Deltapine 61	1.10	•50	198	7.0	5.25	
Stoneville 213	1.10	•51	181	5.7	5.40	
Deltapine 55	1.12	• 52	194	5.9	5.10	
McNair 235	1.12	•52	206	5.4	4.70	
Stoneville 256	1.10	.48	184	4.8	5.20	
Coker 310	1.16	•56	204	5.4	4.90	
Paymaster 303	1.02	•48	198	5.4	4.75	
Acala SJ-5	1.16	•56	244	5.4	4.70	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$R_{\mathcal{A}}$	Hunter's	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value	
Stoneville 825N		-		<sup>R</sup> d 69.2		
Stoneville 825N McNair 220	(inches)	(percent) 83.5	(g/tex)	69.2	<i>b</i> value	
McNair 220	(inches)	(percent)	(g/tex) 23.0		b value	
	(inches)  1.14 1.14	(percent) 83.5 83.5	(g/tex) 23.0 22.5	69.2 69.0	10.5 10.6	
McNair 220 Deltapine 61	1.14 1.14 1.16	(percent)  83.5 83.5 83.5	(g/tex) 23.0 22.5 22.5	69.2 69.0 67.3	10.5 10.6 10.3	
McNair 220  Deltapine 61  Stoneville 213	1.14 1.14 1.16 1.16	(percent)  83.5 83.5 83.5 85.0	23.0 22.5 22.5 23.5	69.2 69.0 67.3 66.8	10.5 10.6 10.3 11.4	
McNair 220  Deltapine 61  Stoneville 213  Deltapine 55	1.14 1.14 1.16 1.16 1.14	(percent)  83.5 83.5 83.5 85.0 83.5	23.0 22.5 22.5 23.5 22.5	69.2 69.0 67.3 66.8 70.8	10.5 10.6 10.3 11.4 10.6	
McNair 220  Deltapine 61  Stoneville 213  Deltapine 55  McNair 235	1.14 1.14 1.16 1.16 1.14 1.16	83.5 83.5 83.5 83.5 85.0 83.5 84.5	(g/tex)  23.0 22.5 22.5 23.5 22.5 24.0	69.2 69.0 67.3 66.8 70.8	10.5 10.6 10.3 11.4 10.6 10.9	
McNair 220  Deltapine 61  Stoneville 213  Deltapine 55  McNair 235  Stoneville 256	1.14 1.14 1.16 1.16 1.14 1.16 1.14	(percent)  83.5 83.5 83.5 85.0 83.5 84.5 83.5	23.0 22.5 22.5 23.5 22.5 24.0 20.5	69.2 69.0 67.3 66.8 70.8 70.0	10.5 10.6 10.3 11.4 10.6 10.9	

Table 64. Central test: Seed data for Bossier City, La.

0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
18 6	3 //	1 01	13 /	5.5
				6.0
			<del>_</del> _	6.0
	- · · · <del>-</del>			5.0
· -				5.5
				6.0
				5.5
				5.5
		= -		6.0
		<del>-</del>		5.5
19.9	3.70	• 40	10.3	J•J
Seed	Seed	Seed	Floaters	Acid-
vo lume	surface	density	(percent)	delinted-
(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
97 9	111.5	0.954	1.3	9.4
- · · · -		-		9.2
				8.7
				9.1
- · · · -				8.5
				9.2
				9.0
				10.0
				10.2
115.5	124.4	•975	2.5	11.3
	18.6 19.5 18.9 17.6 18.5 19.2 17.9 19.6 18.8 19.9 Seed volume (mm <sup>3</sup> ) 97.9 96.7 95.3 94.1 91.4 99.0 92.2 104.2 108.1	18.6 3.44 19.5 3.47 18.9 3.41 17.6 3.51 18.5 3.49 19.2 3.51 17.9 3.48 19.6 3.59 18.8 3.66 19.9 3.70  Seed Seed volume (mm³) area (mm²)  97.9 111.5 96.7 112.6 95.3 109.5 94.1 108.6 91.4 106.4 99.0 112.3 92.2 107.1 104.2 116.2 108.1 119.1	(percent)       (percent)       gossypol (percent)         18.6       3.44       1.01         19.5       3.47       1.31         18.9       3.41       1.40         17.6       3.51       1.36         18.5       3.49       .88         19.2       3.51       1.43         17.9       3.48       .92         19.6       3.59       .88         18.8       3.66       1.09         19.9       3.70       .40         Seed       Seed       Seed         volume       surface       density         (mm³)       area (mm²)       (g/cm³)         97.9       111.5       0.954         96.7       112.6       .949         95.3       109.5       .933         94.1       108.6       .938         91.4       106.4       .935         99.0       112.3       .930         92.2       107.1       .945         104.2       116.2       .963         108.1       119.1       .941	(percent)     (percent)     gossypol (percent)       18.6     3.44     1.01     13.4       19.5     3.47     1.31     11.5       18.9     3.41     1.40     11.7       17.6     3.51     1.36     13.2       18.5     3.49     .88     11.6       19.2     3.51     1.43     11.0       17.9     3.48     .92     12.4       19.6     3.59     .88     11.8       18.8     3.66     1.09     10.8       19.9     3.70     .40     10.3       Seed     Seed     Floaters       volume (mm³)     surface density (percent)     (percent)       95.3     109.5     .933     .3       94.1     108.6     .938     .8       91.4     106.4     .935     1.8       99.0     112.3     .930     .5       92.2     107.1     .945     2.0       104.2     116.2     .963     .5       108.1     119.1     .941     1.8

Table 65. Central test: Yield, boll and yarn tenacity data for College Station, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310  Stoneville 825N  McNair 220  Stoneville 256  McNair 235  Deltapine 55  Deltapine 61  Stoneville 213  Paymaster 303  Acala SJ-5	1098 a 1079 a 1075 a 1074 a 1054 a 963 ab 946 ab 924 ab 742 bc 618 c	4.94 4.52 4.48 4.66 4.41 4.56 4.48 4.73 5.02 5.06	36.9 37.8 38.3 38.1 38.7 39.5 38.0 37.3 35.1	10.3 9.9 10.4 9.7 9.9 9.0 9.4 10.1 12.0 12.4	162 142 162 143 158 145 145 148 146 148 206

Table 66. Central test: Fiber data for College Station, Tex.

Stelometer

 $E_1$ 

Micronaire

reading

Digital Fibrograph
5% S.L. 50% S.L.

2.5% S.L.

Variety

	(inches)	(inches)	(mN/tex)	(percent)		
210		0.51	0.00		. 50	
Coker 310	1.12	0.54	200	5.1	4.50	
Stoneville 825N	1.10	.51	182	5.2	4.70	
McNair 220	1.08	.52	204	5.3	4.65	
Stoneville 256	1.10	•50	17 9	5.0	4.95	
McNair 235	1.09	•52	208	5.5	4.50	
Deltapine 55	1.10	•52	172	5.6	4.40	
Deltapine 61	1.09	•53	192	6.4	4.80	
Stoneville 213	1.10	•52	186	6.0	4.80	
Paymaster 303	1.07	•50	187	4.8	4.50	
Acala SJ-5	1.17	.59	246	5.0	4.65	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$R_{d}$	Hunter's	
	(inches)	(percent)	(g/tex)	<u>.                                    </u>	b value	
Coker 310	1.12	83.5	24.0	(( )	11 /	
Stoneville 825N	1.11		24.0	66.2	11.4	
McNair 220	1.11	84.0	22.5	67.5	11.7	
		84.0	24.5	65.8	11.5	
Stoneville 256	1.15	85.5	22.0	65.8	12.1	
McNair 235	1.10	85.5	24.0	65.2	11.4	
Deltapine 55	1.11	83.0	23.0	66.2	11.5	
Deltapine 61	1.10	84.0	22.0	68.8	12.2	
Stoneville 213	1.09	84.0	24.0	65.5	11.8	
Paymaster 303	1.07	83.0	24.0	62.0	11.3	
Acala SJ-5	1.15	85.0	30.5	67.0	10.1	

Table 67. Central test: Seed data for College Station, Tex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Coker 310	19.5	2.95	0.92	13.1	5.0
Stoneville 825N	18.3	3.05	• 98	14.7	6.0
McNair 220	19.6	3.15	•73	12.7	5.5
Stoneville 256	18.9	3.42	1.03	14.6	5.0
McNair 235	19.2	3.09	.74	12.9	5.5
Deltapine 55	18.5	3.14	•92	12.0	5.5
Deltapine 61	18.7	2.88	•68	14.9	5.5
Stoneville 213	17.3	3.48	• 95	15.2	4.5
Paymaster 303	19.6	3.12	.71	13.7	5.0
Acala SJ-5	19.3	3.35	•61	12.2	4.0
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Coker 310	96.4	110.3	0.939	1.0	9.1
Stoneville 825N	92.8	107.5	.899	3.3	8.3
McNair 220	101.8	114.4	•904	2.5	9.4
Stoneville 256	92.7	107.5	.914	2.8	8.5
McNair 235	104.4	116.3	•858	2.8	9.0
Deltapine 55	89.5	105.0	• 907	1.8	8.1
Deltapine 61	89.0	104.6	•903	2.0	8.0
Stoneville 213	95.2	109.4	• 909	2.5	8.6
Paymaster 303	117.4	125.9	•900	•8	10.6
Acala SJ-5	118.7	126.8	•926	1.8	11.0

Table 68. Central test: Yield, boll and yarn tenacity data for Weslaco, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
V V . 225	701	/ 07	22.2	10 5	157
McNair 235	721 a	4.87	32.3	10.5	156
McNair 220	689 ab	5.03	31.9	10.9	151
Deltapine 55	673 abc	4.61	33.2	9.7	156
Stoneville 825N	593 bcd	4.68	32.7	10.5	141
Deltapine 61	580 cd	5.01	32.2	10.0	156
Stoneville 256	539 de	4.78	32.8	10.7	142
Coker 310	527 de	5.56	30.8	11.6	162
Stoneville 213	505 de	4.59	34.1	11.2	144
Paymaster 303	444 ef	5.68	29.8	12.0	138
Acala SJ-5	379 f	5.49	33.0	11.6	186

Table 69. Central test: Fiber data for Weslaco, Tex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
McNair 235	1.08	0.51	197	5.4	4.50
McNair 220	1.06	.50	205	5.4	4.25
Deltapine 55	1.10	. 52	198	5.4	4.55
Stoneville 825N	1.06	.51	182	5.4	5.15
Deltapine 61	1.08	• 54	201	6.4	4.90
Stoneville 256	1.09	.52	190	5.3	4.95
Coker 310	1.12	• 54	196	5.8	4.20
Stoneville 213	1.07	.51	197	6.2	4.75
Paymaster 303	1.04	.48	186	5.9	3.75
Acala SJ-5	1.10	•58	231	5.6	4.50
	High Volume Instrument			Colorimeter	
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)	,	b value
McNair 235	1.09	84.5	23.0	69.0	11.5
McNair 220	1.08	84.0	23.5	71.0	12.0
Deltapine 55	1.06	84.0	22.5	71.5	11.0
Stoneville 825N	1.08	84.0	21.5	73.2	10.6
Deltapine 61	1.09	86.0	21.0	73.2	10.5
Stoneville 256	1.08	83.5	22.5	71.0	10.4
Coker 310	1.16	85.0	23.0	70.8	11.3
Stoneville 213	1.06	84.0	21.0	68.2	11.3
JEOUCATITE FID		81.5	21.5	71.2	10.8
Paymaster 303	1.04	מו . ז	/ 1 . 7		

Table 70. Central test: Seed data for Weslaco, Tex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	18.0	3.32	0.64	12.8	5.0
McNair 220	18.0	3.32	•61	12.7	5.0
Deltapine 55	17.7	3.29	.78	13.7	4.0
Stoneville 825N	18.0	3.33	.73	16.7	4.0
Deltapine 61	18.1	3.23	•59	14.6	4.0
Stoneville 256	17.1	3.35	•75	13.3	5.0
Coker 310	18.7	3.27	•62	14.6	3.0
Stoneville 213	17.1	3.22	.74	17.0	3.5
Paymaster 303	18.6	3.40	•52	13.8	4.0
Acala SJ-5	19.0	3.60	.49	11.2	3.5
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Ma Naday 225	110.7	120.8	0.858	2.5	9.5
McNair 235		121.5	.880	3.0	
McNair 220	111.5 95.9	109.9	•901	1.5	9.8 8.6
Deltapine 55	103.6	115.7	.920	2.3	9.5
Stoneville 825N		112.8	•920	2.3	9.0
Deltapine 61	99.6				
Stoneville 256	101.8	114.4	•911 •913	2.8	9.3 10.1
Coker 310	110.9	121.2		2.5	
Stoneville 213	99.0	112.3	.904	1.5	8.9
Paymaster 303	115.7	124.6	.912	4.8 6.8	10.5 10.8
Acala SJ-5	119.2	127.2	• 905 	0.0	10.0

Table 71. Central test: Yield, boll and yarn tenacity data for Nueces County, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 55	203 a	3.86	40.2	9.3	138
McNair 235	200 a	6.15	37 • 4	8.9	141
Stoneville 825N ···	189 a	5.72	37.8	8.7	132
McNair 220	188 a	6.08	37.4	8.6	142
Coker 310	187 a	4.62	37.7	8.9	130
Deltapine 61	185 a	5.55	37.9	8.4	138
Stoneville 256	181 a	5.95	38.9	8.6	132
Acala SJ-5	175 a	5.46	35.6	10.0	182
Paymaster 303	173 a	5.01	35.6	9.6	114
Stoneville 213	169 a	4.27	37.0	8.7	132

Table 72. Central test: Fiber data for Nueces County, Tex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire	
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E	reading	
	(inches)	(inches)	(mN/tex)	(percent)		
Deltapine 55	0.98	0.46	161	5•2	4.35	
McNair 235	1.00	.47	179	5.2	3.95	
Stoneville 825N	1.00	.48	157	4.8	4.75	
McNair 220	.97	•45	184	5.0	3.90	
Coker 310	1.00	• 46	168	5.2	4.10	
Deltapine 61	1.00	.48	195	6.5	4.70	
Stoneville 256	1.00	.48	156	4.6	4.75	
Acala SJ-5	1.05	•53	222	5.2	4.10	
Paymaster 303	•96	. 44	166	5.4	3.85	
Stoneville 213	1.00	.48	186	5.6	4.60	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
Deltapine 55	0.98	83.0	22.0	66.2	9.8	
McNair 235	1.00	83.0	21.0	62.8	9.9	
Stoneville 825N	1.00	82.5	20.0	65.5	9.5	
McNair 220	1.00	83.0	22.5	60.5	9.6	
Coker 310	1.00	81.5	21.5	64.5	10.6	
Deltapine 61	1.01	82.5	21.5	64.0	11.4	
Stoneville 256	1.04	83.0	19.5	66.5	9.3	
Acala SJ-5	1.04	84.0	26.0	67.5	10.3	
Paymaster 303	.98	81.5	20.5	66.0	10.9	
Stoneville 213	1.02	84.0	21.0	63.5	9.9	

Table 73. Central test: Seed data for Nueces County, Tex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
D. 1	17.0	3.25	0.65	12.1	6.5
Deltapine 55	17.4				
McNair 235	17.4	3.24 3.18	•52 •65	13.1 15.3	5.5 5.5
Stoneville 825N					
McNair 220	17.5	3.23	.47	12.2	6.0
Coker 310	17.4	3.40	.47	13.1	5.0
Deltapine 61	17.7	3.09	.65	13.5	6.0
Stoneville 256	16.6	3.25	•64	11.8	5.0
Acala SJ-5	18.6	3.50	•53	12.3	4.5
Paymaster 303	17.8	3.21	•52	13.9	4.0
Stoneville 213	16.8	3.29	•66	15.3	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
D.1	91.9	106.8	0.764	0.6	7.0
Deltapine 55	91.9	112.5			7.0
McNair 235			.788	4.5	7.8
Stoneville 825N	94.6	108.9	.813	.8	7.6
McNair 220	101.1	113.9	.788	3.1	8.0
Coker 310	96.4	110.7	.801	2.0	7.7
Deltapine 61	98.1	111.6	.780	•8	7.6
Stoneville 256	90.6	105.8	.851	2.3	7.7
Acala SJ-5	106.2	117.7	.841	1.0	8.9
Paymaster 303	100.6	113.5	<b>.</b> 855	3.3	8.6
Stoneville 213	93.2	107.9	.814	1.7	7.6

## PLAINS REGIONAL COTTON VARIETY TEST

Table 74. Plains test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint . percent	Seed index	Yarn tenacity (mN/tex)
Pioneer Brand 1140	560 a	5.61 bc	34.8 bcd	11.3 ghi	144 cde
Stoneville 213	544 ab	4.84 f	34.4 bcde	10.6 j	135 efg
Tamcot Sp-21S	539 ab	5.16 ef	35.2 ab	10.6 j	134 fgh
Westburn M Lockett 77 Coker 310	527 abc	5.59 bcd	35.0 bc	11.5 fghi	128 gh
	511 bcd	5.33 cde	35.4 ab	11.3 ghi	141 def
	487 cde	5.29 cde	34.3 bcde	11.2 ghij	149 cd
Deltapine SR-2 GSA 71 Tamcot 788	484 def 482 defg 477 defg	5.23 de 5.47 cde 5.47 cde	33.2 fg 33.6 efg 34.3 bcde	11.1 hij 12.2 cde 11.7 defgh	
Coker 5110  Paymaster 303  Stripper 31A  Western 44	476 defg	5.30 cde	34.0 cdef	11.8 defg	146 cd
	471 defg	5.38 cde	34.3 bcde	12.3 cd	134 fg
	455 efg	4.86 f	32.9 g	10.9 ij	110 i
	447 efgh	5.24 de	33.8 defg	11.5 fghi	142 cdef
Dunn 119 Paymaster 785 Lankart LX 571	446 efgh	5.83 b	32.9 g	14.4 a	162 b
	439 fgh	5.17 ef	36.2 a	11.6 efgh	125 h
	437 gh	6.29 a	35.1 bc	13.3 b	128 gh
Paymaster 266 Acala SJ-5	408 h	5.17 ef	33.2 fg	12.1 cdef	151 c
	353 i	5.55 bcd	34.9 bcd	12.7 c	176 a

Table 75. Plains test: Fiber data by cotton variety

Variety	Digital Fibrograph		Stelometer		Micronaire	
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading	
	(inches)	(inches)	(mN/tex)	(percent)		
Pioneer Brand 1140	1.05 ef	0.50 cde	197 defg	6.2 cde	4.50 cde	
Stoneville 213	1.08 cd	.50 cd	193 efgh	6.6 bc	4.63 c	
Camcot Sp-21S	1.06 de	.49 cdefg	182 ghi	7.5 a	4.03 g	
Westburn M	1.02 fgh	.47 h	184 ghi	7.2 a	4.54 cd	
ockett 77	1.02 fgh	.47 h	188 fghi	6.1 def	4.25 efg	
oker 310	1.10 bc	.50 cdef	210 bc	5.8 fg	4.60 c	
eltapine SR-2	1.05 ef	.49 defgh	201 cdef	6.0 ef	4.77 c	
SA 71	1.00 h	.48 efgh	188 fghi	6.6 bc	4.72 c	
amcot 788	1.05 de	.48 defgh	204 cde	5.5 g	4.10 fg	
Coker 5110	1.11 ab	.51 c	197 defg	6.1 ef	4.52 cde	
Paymaster 303	1.02 fgh	.48 fgh	191 efgh	5.7 fg	4.60 c	
Stripper 31A	.92 i	.45 i	174 i	6.0 ef	5.69 a	
Western 44	1.00 h	.48 gh	190 fgh	6.3 cde	4.31 def	
Ounn 119	1.10 b	.53 b	220 ab	5.7 fg	4.66 c	
aymaster 785	.94 i	.47 h	182 ghi	6.6 bcd	5.13 ь	
ankart LX 571	1.04 efg	.50 cdef	179 hi	6.8 ъ	4.74 c	
aymaster 266	1.00 h	.51 c	208 bcd	6.6 bc	4.67 c	
cala SJ-5	1.13 a	.55 a	229 a	6.0 ef	4.19 fg	
	High Volume Instrument			Color	rimeter	
	UHM	Uniformity	Tenacity	$R_d$	Hunter's	
				- u		
	(inches)	(percent)	(g/tex)	<u></u>	b value	
Moneer Brand 1140			(g/tex)			
	1.07 c	83.0 bcd	(g/tex) 24.1 bcd	71.2 a	10.4 de	
toneville 213	1.07 c 1.10 b	83.0 bcd 83.2 abc	(g/tex)  24.1 bcd 23.7 bcde	71.2 a 71.2 ab	10.4 de 11.1 abc	
toneville 213 amcot Sp-21S	1.07 c 1.10 b 1.06 cde	83.0 bcd 83.2 abc 81.4 e	(g/tex)  24.1 bcd 23.7 bcde 22.2 efg	71.2 a 71.2 ab 72.0 a	10.4 de 11.1 abc 10.9 abcde	
toneville 213 amcot Sp-21S estburn M	1.07 c 1.10 b 1.06 cde 1.03 defg	83.0 bcd 83.2 abc 81.4 e 82.0 de	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg	71.2 a 71.2 ab 72.0 a 70.6 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab	
toneville 213 Camcot Sp-21S Cestburn M Cockett 77	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de	
toneville 213  amcot Sp-21S  estburn M  ockett 77  oker 310	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde	
toneville 213  amcot Sp-21S  estburn M  ockett 77  oker 310  eltapine SR-2	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde	
toneville 213  amcot Sp-21S  estburn M  ockett 77  oker 310  eltapine SR-2  SA 71	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde	
toneville 213  amcot Sp-21S  estburn M  ockett 77  oker 310  eltapine SR-2  SA 71  amcot 788	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 10.7 bcde	
toneville 213 amcot Sp-21S estburn M ockett 77 oker 310 eltapine SR-2 SA 71 amcot 788 oker 5110	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd	(g/tex)  24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 10.7 bcde 11.1 abc	
Camcot Sp-21S Vestburn M Cockett 77 Coker 310 Celtapine SR-2 Camcot 788 Coker 5110 Caymaster 303	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a 1.02 fgh	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd 82.0 de	(g/tex)  24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b 23.2 bcdef	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab 70.0 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.6 bcde 10.7 bcde 11.1 abc 11.2 abc	
Stoneville 213 Samcot Sp-21S Sestburn M Sockett 77 Soker 310 Seltapine SR-2 SA 71 Samcot 788 Soker 5110 Saymaster 303 Stripper 31A	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a 1.02 fgh	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd 82.0 de 82.0 de	(g/tex)  24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b 23.2 bcdef 21.5 g	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab 70.0 ab 69.8 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 10.7 bcde 11.1 abc 11.2 abc 10.5 cde	
Stoneville 213 Samcot Sp-21S Sestburn M Sockett 77 Soker 310 Seltapine SR-2 SA 71 Samcot 788 Soker 5110 Saymaster 303 Stripper 31A Sestern 44	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a 1.02 fgh .91 j .99 i	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd 82.0 de 82.0 de 82.4 cd 82.2 cde	(g/tex)  24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b 23.2 bcdef 21.5 g 22.6 defg	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab 70.0 ab 69.8 ab 69.8 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 11.1 abc 11.2 abc 10.5 cde 10.6 bcde	
Stoneville 213  Samcot Sp-21S  Vestburn M  Sockett 77  Soker 310  Seltapine SR-2  SSA 71  Samcot 788  Samcot 788  Samcot 788  Stripper 31A  Vestern 44  Sunn 119	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a 1.02 fgh .91 j .99 i 1.13 a	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd 82.0 de 82.4 cd 82.2 cde 83.6 ab	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b 23.2 bcdef 21.5 g 22.6 defg 27.8 a	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab 70.0 ab 69.8 ab 69.8 ab 69.1 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 10.7 bcde 11.1 abc 11.2 abc 10.5 cde 10.6 bcde	
camcot Sp-21S Camcot Sp-21S Cockett 77 Coker 310 Celtapine SR-2 Camcot 788 Camcot 788 Camcot 788 Camcot 788 Caymaster 303 Caymaster 303 Caymaster 31A Caymaster 31A Caymaster 344 Caymaster 785	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a 1.02 fgh .91 j .99 i 1.13 a .92 j	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd 82.0 de 82.4 cd 82.2 cde 83.6 ab 82.3 cde	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b 23.2 bcdef 21.5 g 22.6 defg 27.8 a 22.2 efg	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab 70.0 ab 69.8 ab 69.8 ab 69.1 ab 68.3 b	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 10.7 bcde 11.1 abc 11.2 abc 10.5 cde 10.6 bcde 10.2 e 11.5 a	
Camcot Sp-21S Vestburn M Coker 77 Coker 310 Caltapine SR-2 Camcot 788 Camcot 788 Camcot 788 Camcot 788 Caymaster 303 Caymaster 31A Caymaster 44 Caymaster 785 Cankart LX 571	1.07 c 1.10 b 1.06 cde 1.03 defg 1.03 efg 1.13 a 1.07 c 1.01 ghi 1.06 cd 1.14 a 1.02 fgh .91 j .99 i 1.13 a .92 j 1.04 cdef	83.0 bcd 83.2 abc 81.4 e 82.0 de 82.1 de 82.7 bcd 83.2 abc 82.9 bcd 82.1 de 82.9 bcd 82.0 de 82.4 cd 82.2 cde 83.6 ab 82.3 cde	24.1 bcd 23.7 bcde 22.2 efg 22.8 cdefg 22.2 efg 23.5 bcde 23.8 bcde 21.8 fg 24.8 b 24.6 b 23.2 bcdef 21.5 g 22.6 defg 27.8 a 22.2 efg	71.2 a 71.2 ab 72.0 a 70.6 ab 69.4 ab 71.8 a 68.6 b 68.4 b 71.0 ab 69.8 ab 70.0 ab 69.8 ab 69.8 ab 69.1 ab	10.4 de 11.1 abc 10.9 abcde 11.3 ab 10.4 de 10.9 abcde 10.9 abcde 10.6 bcde 10.7 bcde 11.1 abc 11.2 abc 10.5 cde 10.6 bcde 10.5 cde 10.6 bcde	

Table 76. Plains test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Pioneer Brand 1140	20.7 a	3.15 fgh	0.62 bcd	11.0 ef	5.0 a
Stoneville 213	17.9 ef	3.04 i	.84 a	13.7 a	3.5 fgh
Tamcot Sp-21S	18.7 cdef	3.37 cd	.51 de	9.5 g	4.8 ab
Westburn M	18.9 cdef	3.44 bc	.65 bcd	10.8 ef	5.0 a
Lockett 77	19.3 abcde	3.36 de	•52 de	12.1 cd	4.3 bcde
Coker 310	18.1 def	3.12 h	.86 a	13.5 ab	3.8 efg
Deltapine SR-2	19.9 abc	3.17 fgh	•54 de	9.4 g	4.8 ab
GSA 71	18.8 cdef	3.38 cd	•57 de	12.1 cd	4.3 bcde
Tamcot 788	19.4 abcd	3.33 de	.53 de	11.3 def	4.3 bcde
Coker 5110	19.8 abc	3.13 gh	.78 ab	12.2 cd	4.2 cde
Paymaster 303	20.4 ab	3.19 fg	.77 abc	11.6 cde	4.5 abcd
Stripper 31A	19.1 bcdef	3.37 cd	.77 abc	11.6 de	4.7 abc
Western 44	19.5 abcd	3.54 a	.58 cde	10.5 f	4.8 ab
Dunn 119	17.7 f	3.30 e	•50 de	13.9 a	3.3 gh
Paymaster 785	18.5 cdef	3.45 b	•52 de	12.0 cd	4.5 abcd
Lankart LX 571	18.6 cdef	3.39 bcd	.41 e	10.8 ef	5.0 a
Paymaster 266	19.1 bcdef	3.21 f	.55 de	11.8 cde	4.0 def
Acala SJ-5	19.3 abcde	3.15 fgh	.54 de	12.7 bc	3.0 h
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
Pioneer Brand 1140	104.7 e	116.5 e	1.016 abc	2.8 def	10.6 gh
Stoneville 213	98.5 f	111.9 f	.989 fgh	4.3 cdef	9.7 i
Tamcot Sp-21S	104.1 e	116.1 e	.999 def	5.8 bcd	10.4 h
Westburn M	111.6 c	121.7 c	1.021 ab	2.8 def	11.3 de
Lockett 77	111.5 c	121.6 c	1.016 abc	3.2 cdef	11.4 de
Coker 310	107.0 de	118.3 de	1.009 bcd	2.9 cdef	10.7 gh
Deltapine SR-2	113.8 c	123.2 c	.992 efg	3.7 cdef	11.2 ef
GSA 71	125.1 Ъ	131.2 b	.978 h	5.7 bcd	12.3 c
	112 2	122.1 c	1.020 ab	2.2 ef	11.4 de
Tamcot 788	112.3 c	122.1 C			1111 40
Tamcot 788	112.3 c	122.5 c	1.009 bcd	1.8 ef	11.2 ef
Coker 5110 Paymaster 303	112.8 c 114.7 c				
Coker 5110 Paymaster 303 Stripper 31A	112.8 c 114.7 c 108.1 d	122.5 c 123.9 c 119.1 d	1.009 bcd	1.8 ef 3.3 cdef 6.1 bc	11.2 ef
Coker 5110  Paymaster 303  Stripper 31A  Western 44	112.8 c 114.7 c 108.1 d 113.5 c	122.5 c 123.9 c 119.1 d 123.0 c	1.009 bcd 1.004 cde 1.014 abc 1.026 a	1.8 ef 3.3 cdef	11.2 ef 11.4 de
Coker 5110  Paymaster 303  Stripper 31A  Western 44  Dunn 119	112.8 c 114.7 c 108.1 d 113.5 c 140.1 a	122.5 c 123.9 c 119.1 d 123.0 c 141.5 a	1.009 bcd 1.004 cde 1.014 abc 1.026 a .925 j	1.8 ef 3.3 cdef 6.1 bc 1.8 f 12.1 a	11.2 ef 11.4 de 10.9 fg 11.6 d 13.0 b
Coker 5110  Paymaster 303  Stripper 31A  Western 44  Dunn 119  Paymaster 785	112.8 c 114.7 c 108.1 d 113.5 c 140.1 a 113.9 c	122.5 c 123.9 c 119.1 d 123.0 c 141.5 a 123.3 c	1.009 bcd 1.004 cde 1.014 abc 1.026 a .925 j .996 defg	1.8 ef 3.3 cdef 6.1 bc 1.8 f 12.1 a 5.6 bcd	11.2 ef 11.4 de 10.9 fg 11.6 d 13.0 b 11.3 de
Coker 5110  Paymaster 303  Stripper 31A  Western 44  Dunn 119  Paymaster 785  Lankart LX 571	112.8 c 114.7 c 108.1 d 113.5 c 140.1 a 113.9 c 140.8 a	122.5 c 123.9 c 119.1 d 123.0 c 141.5 a 123.3 c 142.0 a	1.009 bcd 1.004 cde 1.014 abc 1.026 a .925 j .996 defg .949 i	1.8 ef 3.3 cdef 6.1 bc 1.8 f 12.1 a 5.6 bcd 5.0 bcde	11.2 ef 11.4 de 10.9 fg 11.6 d 13.0 b 11.3 de 13.4 a
Coker 5110  Paymaster 303  Stripper 31A  Western 44	112.8 c 114.7 c 108.1 d 113.5 c 140.1 a 113.9 c	122.5 c 123.9 c 119.1 d 123.0 c 141.5 a 123.3 c	1.009 bcd 1.004 cde 1.014 abc 1.026 a .925 j .996 defg	1.8 ef 3.3 cdef 6.1 bc 1.8 f 12.1 a 5.6 bcd	11.2 ef 11.4 de 10.9 fg 11.6 d 13.0 b 11.3 de

Table 77. Plains test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Chickasha (irr.),	605 -	C 21	25.0	10.0.1	120 1
0kla	695 a	6.21 a	35.8 a	12.0 ab	138 bc
Altus, Okla	689 a	6.01 a	33.9 ъ	12.9 a	144 ab
Lubbock, Tex	626 a	4.72 Ъ	34.4 Ъ	11.4 b	139 bc
Lamesa, Tex	207 Ъ	4.27 b	33.5 b	10.3 c	138 c
Mangum, Okla	127 Ъ	5.67 a	33.5 ъ	12.3 a	146 a

Table 78. Plains test: Fiber data by test location

Location	Digital Fibrograph		Stelo	Stelometer		
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading	
	(inches)	(inches)	(mN/tex)	(percent)		
Chickasha (irr.),						
Okla	1.04 a	0.50 a	195 bc	5.9 b	4.86 Ъ	
Altus, Okla	1.05 a	•52 a	197 b	6.2 ab	5.10 a	
Lubbock, Tex	1.03 a	.47 b	187 d	6.6 a	4.12 c	
Lamesa, Tex	.98 b	.45 b	190 cd	6.6 a	3.86 d	
Mangum, Okla	1.07 a	•52 a	210 a	6.2 ab	5.01 ab	
	Hig	h Volume Instru	ment Colo		rimeter	
	UHM	Uniformity		$R_d$	Hunter's	
	(inches)	(percent)	(g/tex)	<b>~</b>	b value	
Chickasha (irr.),						
Okla	1.07 a	83.7 ъ	23.1 c	68.2 b	10.1 d	
Altus, Okla	1.06 a	83.8 ab	22.6 c	67.9 b	10.5 c	
Lubbock, Tex	1.04 a	81.1 c	24.6 a	73.7 a	11.3 b	
Lamesa, Tex	.98 b	81.0 c	24.2 ab	73.3 a	11.9 a	
	• > 0	0110	2172 40			

Table 79. Plains test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Chickasha (irr.),					
0kla	18.8 a	3.28 a	0.63 a	11.8 a	4.5 a
Altus, Okla	19.2 a	3.27 a	.56 Ъ	11.4 b	4.2 b
Lubbock, Tex	NA	NA	NA	NA	NA
Lamesa, Tex	NA	NA	NA	NA	NA
Mangum, Okla	19.2 a	3.29 a	•65 a	11.9 ь	4.3 ab
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm²)	(g/cm <sup>3</sup> )		seed index
Chickasha (irr.),					
Okla	114.9 a	123.9 a	0.998 a	4.8 a	11.4 a
Altus, Okla	113.5 b	122.9 b	1.002 a	4.3 a	11.3 a
Lubbock, Tex	NA	NA	NA	NA	NA
Lamesa, Tex	NA	NA	NA	NA	NA
Mangum, Okla	115.2 a	124.1 a	.991 b	4.5 a	11.4 a

Table 80. Plains test: Combined yield, boll and yarn tenacity data for Altus, Mangum, and Chickasha, Okla., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213 Pioneer Brand 1140 Westburn M Tamcot Sp-21S Lockett 77 Coker 5110 Deltapine SR-2 Tamcot 788 GSA 71 Coker 310 Paymaster 303 Lankart LX 571 Western 44 Stripper 31A	610 a	5.29 d	34.8 bcdef	11.0 hi	132 ef
	608 a	6.16 bc	34.9 bcdef	11.8 efgh	151 bc
	596 a	6.10 bc	36.1 ab	12.0 efg	129 f
	584 a	5.69 cd	35.4 abcd	10.8 i	136 def
	560 ab	5.91 bc	36.0 abc	11.8 efgh	144 bcde
	529 bc	5.94 bc	34.3 defg	12.7 cde	150 bcd
	528 bc	5.92 bc	33.3 fg	11.7 fghi	147 bcd
	511 bcd	6.05 bc	33.9 defg	13.0 bcd	166 a
	506 bcd	6.07 bc	33.5 fg	12.5 cdef	130 f
	498 cd	5.73 cd	33.7 efg	11.7 fghi	151 bc
	479 cde	5.95 bc	34.5 cdefg	13.2 bc	138 cdef
	478 cde	7.07 a	35.2 bcde	13.8 b	127 f
	465 de	5.91 bc	34.1 defg	12.2 defg	147 bcd
	462 de	5.35 d	33.4 fg	11.5 ghi	107 g
Paymaster 785 Paymaster 266 Dunn 119 Acala SJ-5	456 de	5.91 bc	36.8 a	12.2 defg	127 f
	431 e	5.91 bc	33.7 efg	13.0 bcd	152 b
	428 e	6.29 b	33.1 g	14.8 a	165 a
	335 f	6.10 bc	35.9 abc	13.3 bc	175 a

Table 81. Plains test: Combined fiber data for Altus, Mangum, and Chickasha, Okla., by cotton variety

Variety	Digital Fi	lbrograph	Stelom	eter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Stoneville 213	1.11 cd	0.52 cd	198 bcdefg	6.2 def	5.12 c	
Pioneer Brand 1140	1.07 ef	•52 cd	201 bcdef	6.0 defgh	4.90 cde	
Westburn M	1.04 ghij	.50 efg	188 defg	7.0 ab	5.03 cd	
Tamcot Sp-21S	1.08 de	.52 cde	188 defg	7.4 a	4.22 g	
Lockett 77	1.04 ghi	.50 efg	192 cdefg	6.0 defghi	4.62 ef	
Coker 5110	1.15 a	•54 ab	203 bcde	6.1 defg	4.90 cde	
Deltapine SR-2	1.08 e	.51 cdefg	209 abcd	5.9 efghi	5.13 c	
Camcot 788	1.08 de	.51 cdefg	212 abc	5.4 1	4.47 fg	
GSA 71	1.01 ij	.50 efg	190 cdefg	6.5 cd	5.03 cd	
Coker 310	1.12 bc	•53 bc	219 ab	5.6 ghi	5.00 cd	
Paymaster 303	1.04 fgh	.49 g	200 bcdefg	5.5 hi	5.00 cd	
Lankart LX 571	1.06 efg	•52 cdef	180 fg	6.7 bc	5.20 c	
Western 44	1.02 hij	•50 defg	195 cdefg	6.2 def	4.77 def	
Stripper 31A	.92 1	.46 h	178 g	5.7 fghi	6.15 a	
Paymaster 785	.96 k	.49 g	186 efg	6.3 cde	5.58 b	
Paymaster 266	1.01 j	•52 bcd	210 abcd	6.3 cde	5.23 c	
Ounn 119	1.11 bc	•55 ab	228 a	5.5 hi	4.92 cde	
Acala SJ-5	1.14 ab	.56 a	229 a	5.9 efghi	4.57 f	
					•	
	High	n Volume Instru		Color	imeter	
	UHM	Uniformity	Tenacity	$\frac{\text{Color}}{R_d}$	Hunter's	
Stoneville 213	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)  22.7 bcdef	R <sub>d</sub> 68.7 a	Hunter's b value	
Pioneer Brand 1140	UHM (inches)  1.13 bcd 1.10 cde	Uniformity (percent)  84.5 abc 84.2 abcde	Tenacity (g/tex) 22.7 bcdef 24.2 bc	68.7 a 69.6 a	Hunter's b value  10.3 abc 9.6 bc	
Pioneer Brand 1140 Westburn M	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef	68.7 a 69.6 a 68.3 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a	
Pioneer Brand 1140 Westburn M Tamcot Sp-21S	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def	68.7 a 69.6 a 68.3 a 69.2 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab	
Pioneer Brand 1140 Westburn M Famcot Sp-21S Lockett 77	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc	
Pioneer Brand 1140 Westburn M Samcot Sp-21S Cockett 77 Coker 5110	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc	Tenacity (g/tex) 22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a	
Pioneer Brand 1140 Westburn M Famcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.5 abc	Tenacity (g/tex) 22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2 Camcot 788	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.3 abcd 83.3 cdef	Tenacity (g/tex) 22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2 Camcot 788 CSA 71	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.5 abc 84.3 abcd 83.3 cdef 83.7 cde	Tenacity (g/tex) 22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.3 abc	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2 Camcot 788 GSA 71 Coker 310	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef 1.10 cdef	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.5 abc 84.3 abcd 83.7 cde 84.0 abcde	Tenacity (g/tex) 22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.3 abc 10.7 a	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2 Camcot 788 Coker 310 Paymaster 303	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef 1.03 hi 1.16 ab 1.05 ghi	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.5 abc 84.3 abcd 83.7 cde 84.0 abcde 83.2 def	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd 22.8 bcdef	Rd  68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a 68.1 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.3 abc 10.9 a	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Lockett 77 Coker 5110 Deltapine SR-2 Camcot 788 Coker 310 Paymaster 303 Lankart LX 571	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef 1.03 hi 1.16 ab 1.05 ghi 1.06 efgh	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.3 abcd 83.3 cdef 84.0 abcde 83.2 def 84.0 abcde	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd 22.8 bcdef 23.0 bcdef	Rd  68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a 68.1 a 68.3 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.0 abc 10.0 abc 10.7 a 10.9 a 10.7 a	
Stoneville 213 Pioneer Brand 1140 Westburn M Tamcot Sp-21S Lockett 77 Coker 5110 Deltapine SR-2 Tamcot 788 SSA 71 Coker 310 Paymaster 303 Lankart LX 571 Western 44	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.03 hi 1.16 ab 1.05 ghi 1.06 efgh 1.02 hi	Uniformity (percent) 84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.5 abc 84.5 abc 84.0 abcde 83.7 cde 84.0 abcde 83.2 def 84.0 abcde 83.8 bcde	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd 22.8 bcdef 23.0 bcdef 21.8 def	68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a 68.1 a 68.3 a 57.8 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.7 a 10.9 a 10.7 a 10.9 a 10.7 a	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2 Camcot 788 Coker 310 Coker 310 Paymaster 303 Cankart LX 571 Western 44 Stripper 31A	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef 1.03 hi 1.16 ab 1.05 ghi 1.06 efgh 1.02 hi .92 j	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.3 abcd 83.7 cde 84.0 abcde 83.2 def 84.0 abcde 83.8 bcde 83.0 ef	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd 22.8 bcdef 23.0 bcdef 21.8 def 21.0 ef	Rd  68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a 68.1 a 68.3 a 57.8 a 67.6 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.7 a 10.9 a 10.7 a 10.0 abc 10.0 abc	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Celtapine SR-2 Camcot 788 Coker 310 Coker 310 Caymaster 303 Caymaster 303 Caymaster 44 Coker 31A Caymaster 266	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef 1.03 hi 1.16 ab 1.05 ghi 1.06 efgh 1.02 hi .92 j .95 j	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.3 abcd 83.3 cdef 84.0 abcde 83.2 def 84.0 abcde 83.2 def 84.0 abcde 83.0 ef 83.0 ef	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd 22.8 bcdef 23.0 bcdef 21.8 def 21.7 def	Rd  68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a 68.1 a 68.3 a 57.8 a 67.6 a 66.6 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.7 a 10.9 a 10.7 a 10.0 abc 10.0 abc 10.0 abc 10.0 abc	
Pioneer Brand 1140 Westburn M Camcot Sp-21S Cockett 77 Coker 5110 Deltapine SR-2 Camcot 788 Coker 310 Coker 310 Caymaster 303 Caymaster 303 Caymaster 44 Stripper 31A	UHM (inches)  1.13 bcd 1.10 cde 1.06 fgh 1.09 defg 1.06 efgh 1.18 a 1.10 cdef 1.10 cdef 1.10 cdef 1.03 hi 1.16 ab 1.05 ghi 1.06 efgh 1.02 hi .92 j .95 j 1.01 i	Uniformity (percent)  84.5 abc 84.2 abcde 83.3 cdef 82.3 f 83.3 cdef 84.5 abc 84.3 abcd 83.7 cde 84.0 abcde 83.2 def 84.0 abcde 83.8 bcde 83.0 ef 83.0 ef	Tenacity (g/tex)  22.7 bcdef 24.2 bc 22.0 cdef 21.3 def 21.8 def 24.8 b 22.8 bcdef 24.8 b 20.7 f 23.7 bcd 22.8 bcdef 23.0 bcdef 21.8 def 21.0 ef	Rd  68.7 a 69.6 a 68.3 a 69.2 a 68.8 a 69.2 a 67.4 a 68.8 a 66.9 a 68.4 a 68.1 a 68.3 a 57.8 a 67.6 a	Hunter's b value  10.3 abc 9.6 bc 10.9 a 10.5 ab 10.3 abc 10.8 a 10.3 abc 10.0 abc 10.7 a 10.9 a 10.7 a 10.0 abc 10.0 abc	

Table 82. Plains test: Combined yield, boll and yarn tenacity data for Lubbock and Lamesa, Tex., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Pioneer Brand 1140 Tamcot Sp-21S Coker 310 Dunn 119 Paymaster 303 Stoneville 213 GSA 71 Stripper 31A Lockett 77	494 a 478 ab 471 abc 469 abc 459 abc 454 abc 449 abcd 445 abcd 443 abcd	4.80 abc 4.38 bcdefg 4.63 bcde 5.16 a 4.53 bcdefg 4.15 efg 4.15 fg 4.14 fg 4.46 bcdefg	34.6 abcd 35.1 abc 35.1 ab 32.5 fg 34.2 abcde 33.9 bcdef 33.8 bcdefg 32.3 g 34.7 abcd	10.6 def 10.3 def 10.5 def 13.7 a 11.0 cd 9.9 ef 11.7 c 10.0 ef 10.4 def	134 fghi 131 ghi 146 cde 158 b 129 hij 140 efg 130 hij 114 k 137 fgh
Westburn M  Tamcot 788  Deltapine SR-2  Western 44  Paymaster 785  Coker 5110  Lankart LX 571  Paymaster 266  Acala SJ-5	434 abcd 431 abcd 425 abcd 423 abcd 416 bcd 404 cd 382 d 378 d 378 d	4.83 ab 4.61 bcdef 4.19 efg 4.23 defg 4.06 g 4.33 cdefg 5.12 a 4.05 g 4.71 abcd	33.6 cdefg 34.8 abcd 33.0 efg 33.4 defg 35.4 a 33.8 bcdefg 34.9 abcd 32.6 fg 33.6 bcdefg	10.8 de 9.8 f 10.2 def 10.5 def 10.7 de 10.6 def 12.6 b 10.8 de 11.7 c	128 ij 151 bc 142 def 136 fghi 122 jk 139 efg 128 hij 149 cd 176 a

Table 83. Plains test: Combined fiber data for Lubbock and Lamesa, Tex., by cotton variety

Variety	Digital Fi	brograph	Stelon	neter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Pioneer Brand 1140	1.01 def	0.46 cde	190 cdef	6.6 bcdef	3.90 cdefg	
Tamcot Sp-21S Coker 310	1.02 de 1.06 bc	.45 de .46 cde	173 fg 198 bcd	7.8 a 6.0 efg	3.75 fg 4.00 cdefg	
Dunn 119	1.00 bc	.50 b	208 Ъ	6.0 fg	4.00 cderg	
Paymaster 303	1.00 ef	•45 de	177 efg	6.0 fg	4.00 cdefg	
Stoneville 213	1.04 cd	•47 cd	186 defg	7.4 abc	3.90 cdefg	
GSA 71	.98 fg	.46 de	185 defg	6.9 bcdef	4.25 bcd	
Stripper 31A	•93 h	•44 e	169 g	6.4 defg	5.00 a	
Lockett 77	•98 fg	.44 e	182 defg	6.4 defg	3.70 fg	
Westburn M	1.00 ef	.44 e	178 def	7.5 ab	3.80 efg	
Tamcot 788	1.02 de	.44 de	193 bcde	5.6 g	3.55 g	
Deltapine SR-2	1.00 ef	.46 de	190 cdef	6.2 defg	4.22 bcde	
Western 44	•96 g	.44 e	182 defg	6.5 cdef	3.62 fg	
Paymaster 785	•91 h	•44 de	177 efg	6.9 bcde	4.45 Ъ	
Coker 5110	1.06 c	•46 de	186 defg	6.2 defg	3.95 cdefg	
Lankart LX 571	1.00 ef	.46 cde	177 efg	6.9 bcdef	4.05 bcdef	
Paymaster 266	1.00 ef	•49 bc	206 bc	7.0 abcd	3.82 defg	
Acala SJ-5	1.12 a	.53 a	230 a	6.1 efg	3.62 fg	
	High	Volume Instru	ment	Color	imeter	
	UHM	Uniformity	Tenacity	$R_d$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
Pioneer Brand 1140	1.01 defg	81.2 abcde	24.0 cde	73.8 abcde	11.5 abcd	
		0112 0000				
Tamcot Sp-21S	1.01 de	80.0 de		76.1 ab		
Tamcot Sp-21S		80.0 de 80.8 bcde	23.5 def		11.5 abcd	
Coker 310	1.08 b	80.8 bcde	23.5 def 23.2 def	76.1 ab 76.9 a 74.1 abc		
-	1.08 b 1.12 a	80.8 bcde 82.2 ab	23.5 def 23.2 def 28.2 a	76.9 a	11.5 abcd 11.2 bcd 11.2 bcd	
Coker 310 Dunn 119	1.08 b 1.12 a .98 fgh	80.8 bcde 82.2 ab 80.2 cde	23.5 def 23.2 def 28.2 a 23.8 cdef	76.9 a 74.1 abc	11.5 abcd 11.2 bcd 11.2 bcd 11.6 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213	1.08 b 1.12 a .98 fgh 1.05 c	80.8 bcde 82.2 ab 80.2 cde	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc	76.9 a 74.1 abc 73.0 bcdef	11.5 abcd 11.2 bcd 11.2 bcd 11.6 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71	1.08 b 1.12 a .98 fgh 1.05 c .98 gh	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def	76.9 a 74.1 abc 73.0 bcdef 74.9 abc	11.5 abcd 11.2 bcd 11.2 bcd 11.6 abc 12.3 ab	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71	1.08 b 1.12 a .98 fgh 1.05 c .98 gh	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef	11.5 abcd 11.2 bcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd	11.5 abcd 11.2 bcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788  Deltapine SR-2	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg 1.02 d	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde 81.5 abcd	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd 25.2 bc	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc 70.2 f	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc 11.8 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788  Deltapine SR-2  Western 44	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg 1.02 d .94 i	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde 81.5 abcd 79.8 e	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd 25.2 bc 23.8 cdef	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc 70.2 f 72.8 cdef	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc 11.8 abc 11.4 bcd	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788  Deltapine SR-2  Western 44  Paymaster 785	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg 1.02 d .94 i .88 j	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde 81.5 abcd 79.8 e 81.2 abcde	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd 25.2 bc 23.8 cdef 23.0 ef	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc 70.2 f 72.8 cdef 70.9 def	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc 11.8 abc 11.4 bcd 12.6 a	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788  Deltapine SR-2  Western 44  Paymaster 785  Coker 5110	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg 1.02 d .94 i .88 j 1.08 b	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde 81.5 abcd 79.8 e 81.2 abcde	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd 25.2 bc 23.8 cdef 23.0 ef 24.2 bcde	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc 70.2 f 72.8 cdef 70.9 def 70.8 def	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc 11.8 abc 11.8 abc 11.4 bcd 12.6 a 11.7 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788  Deltapine SR-2  Western 44  Paymaster 785  Coker 5110  Lankart LX 571	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg 1.02 d .94 i .88 j 1.08 b 1.01 def	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde 81.5 abcd 79.8 e 81.2 abcde 80.5 cde 81.5 abcd	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd 25.2 bc 23.8 cdef 23.0 ef 24.2 bcde 23.5 def	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc 70.2 f 72.8 cdef 70.9 def 70.8 def 74.8 abc	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc 11.8 abc 11.4 bcd 12.6 a 11.7 abc 11.6 abc	
Coker 310  Dunn 119  Paymaster 303  Stoneville 213  GSA 71  Stripper 31A  Lockett 77  Westburn M  Tamcot 788  Deltapine SR-2  Western 44  Paymaster 785  Coker 5110  Lankart LX 571	1.08 b 1.12 a .98 fgh 1.05 c .98 gh .90 j .98 efgh 1.00 defgh 1.01 defg 1.02 d .94 i .88 j 1.08 b	80.8 bcde 82.2 ab 80.2 cde 81.2 abcde 81.8 abc 81.5 abcd 80.2 cde 80.0 de 80.2 cde 81.5 abcd 79.8 e 81.2 abcde 80.5 cde 81.5 abcd	23.5 def 23.2 def 28.2 a 23.8 cdef 25.2 bc 23.5 def 22.2 f 22.8 ef 24.0 cde 24.8 bcd 25.2 bc 23.8 cdef 23.0 ef 24.2 bcde	76.9 a 74.1 abc 73.0 bcdef 74.9 abc 70.6 ef 73.1 bcdef 70.2 f 73.9 abcd 74.4 abc 70.2 f 72.8 cdef 70.9 def 70.8 def 74.8 abc	11.5 abcd 11.2 bcd 11.6 abc 12.3 ab 11.1 cd 11.2 cd 10.5 d 12.0 abc 11.6 abc 11.8 abc 11.8 abc 11.4 bcd 12.6 a 11.7 abc	

Table 84. Plains test: Yield, boll and yarn tenacity data for Chickasha, Okla. (irrigated)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	895 a	5.32	36.9	10.5	127
Westburn M	839 ab	6.44	36.0	11.5	126
Tamcot Sp-21S	829 ab	5.74	37.3	10.5	134
Pioneer Brand 1140	797 abc	6.32	36.4	11.0	153
Lockett 77	796 abc	6.12	37.1	12.0	132
Paymaster 303	731 bcd	6.40	36.2	12.5	138
Deltapine SR-2	730 bcd	6.30	35.0	12.0	147
Coker 5110	696 cde	6.40	36.1	12.0	134
Coker 310	683 cdef	6.04	37.5	11.5	156
Western 44	661 def	6.06	35.0	12.0	146
GSA 71	661 def	6.20	33.2	12.5	130
Tamcot 788	649 def	6.86	35.0	13.0	164
Paymaster 785	644 def	6.46	37.3	11.0	116
Lankart LX 571	626 defg	7.51	36.1	14.0	126
Stripper 31A	619 defg	5.56	34.0	11.5	102
Dunn 119	574 efg	6.48	34.1	14.0	157
Paymaster 266	562 fg	6.18	34.6	12.5	152
Acala SJ-5	521 g	5.36	37.5	12.5	151

Table 85. Plains test: Fiber data for Chickasha, Okla. (irrigated)

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Stoneville 213	1.09	0.51	191	6.0	4.95
Westburn M	1.04	•49	191	6.6	5.10
Tamcot Sp-21S	1.05	•50	186	7.0	4.05
Pioneer Brand 1140	1.05	•52	203	6.0	4.90
Lockett 77 ·····	1.01	.49	195	5.8	4.40
Paymaster 303	1.06	•50	187	5.4	4.90
eltapine SR-2	1.06	•50	208	6.0	5.00
Coker 5110	1.11	•51	195	5.7	4.80
Coker 310	1.10	•52	206	5.4	4.90
Vestern 44	1.02	•50	200	6.1	4.80
SSA 71 ······	1.00	.49	178	6.2	4.80
Tamcot 788	1.07	•50	220	5.2	4.20
	•96	•50	190	6.3	5.55
Paymaster 785		.48	180	6.2	5.20
Lankart LX 571	1.04				
Stripper 31A	•92	.46	166	5.6	5.85
ounn 119	1.11	•54	208	5.3	4.50
aymaster 266	1.00	•52	211	6.2	4.95
Acala SJ-5	1.12	•53	193	6.0	4.65
	Hig	h Volume Instru	ıment	Colorim	
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		<i>b</i> value
Stoneville 213	1.12	84.0	22.5	69.2	10.3
Westburn M	1.07	83.5	22.5	68.0	10.5
Camcot Sp-21S	1.06	82.0	20.5	66.5	10.0
•		84.0	24.5	67.0	9.4
ioneer Brand 1140	1.10	83.0	21.5	64.5	9.9
ockett 77	1.02				
aymaster 303	1.08	83.5	22.5	68.2	10.1
eltapine SR-2	1.12	84.5	23.0	68.8	10.5
oker 5110	1.16	83.5	25.0	69.5	10.9
Soker 310	1.16	84.5	24.5	68.8	10.7
estern 44	1.04	84.0	22.0	64.8	9.5
	αα	83.0	21.0	67.2	10.0
SSA 71	.99			71 0	100
SSA 71	1.12	84.0	26.5	71.0	10.0
SSA 71	1.12 .94	83.0	21.5	67.2	9.9
SSA 71	1.12	83.0 84.0	21.5 23.5	67.2 69.0	9.9 10.4
SSA 71	1.12 .94	83.0	21.5 23.5 20.0	67.2 69.0 68.5	9.9 10.4 9.8
SSA 71	1.12 .94 1.08	83.0 84.0	21.5 23.5	67.2 69.0	9.9 10.4
GSA 71	1.12 .94 1.08 .92	83.0 84.0 83.5	21.5 23.5 20.0	67.2 69.0 68.5	9.9 10.4 9.8

Table 86. Plains test: Seed data for Chickasha, Okla. (irrigated)

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	17.5	3.06	0.87	13.9	3.5
Westburn M	19.0	3.42	•65	10.8	5.0
Tamcot Sp-21S	18.7	3.38	. 44	9.4	5.0
Pioneer Brand 1140	20.6	3.12	•62	11.2	5.0
Lockett 77 ·····	19.3	3.36	•50	12.2	4.0
Paymaster 303	20.2	3.15	.86	12.0	5.0
Deltapine SR-2	19.7	3.17	.63	9.0	4.5
Coker 5110	19.9	3.15	.91	12.5	4.5
Coker 310	14.5	3.11	.93	14.2	4.0
Western 44	19.7	3.55	•56	11.1	4.5
GSA 71	18.9	3.41	•50	12.5	4.0
Tamcot 788	19.6	3.33	•56	11.4	5.0
Paymaster 785	18.5	3.47	•52	11.7	5.0
Lankart LX 571	18.5	3.33	.35	10.9	5.5
Stripper 31A	19.0	3.37	.83	12.2	5.0
Dunn 119	17.3	3.33	.49	13.8	4.0
Paymaster 266	19.4	3.29	• 57	11.5	4.0
Acala SJ-5	19.3	3.12	.60	12.7	3.0
Real do 5 villivi	1713	3412	700	124.	3.0
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
	00 (	112.0	0.990	4.0	9.7
Stoneville 213	ux h		0.000		
Stoneville 213	98.6				
Westburn M	113.7	123.2	1.022	2.8	11.4
Westburn M Tamcot Sp-21S	113.7 104.1	123.2 116.1	1.022 1.009	2.8 6.8	11.4 10.5
Westburn M Tamcot Sp-21S Pioneer Brand 1140	113.7 104.1 106.4	123.2 116.1 117.8	1.022 1.009 1.013	2.8 6.8 3.3	11.4 10.5 10.8
Westburn M Tamcot Sp-21S Pioneer Brand 1140 Lockett 77	113.7 104.1 106.4 112.8	123.2 116.1 117.8 122.5	1.022 1.009 1.013 1.018	2.8 6.8 3.3 3.8	11.4 10.5 10.8 11.5
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303	113.7 104.1 106.4 112.8 116.5	123.2 116.1 117.8 122.5 125.2	1.022 1.009 1.013 1.018 .995	2.8 6.8 3.3 3.8 4.3	11.4 10.5 10.8 11.5 11.3
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2	113.7 104.1 106.4 112.8 116.5 112.8	123.2 116.1 117.8 122.5 125.2 122.5	1.022 1.009 1.013 1.018 .995 1.004	2.8 6.8 3.3 3.8 4.3 4.0	11.4 10.5 10.8 11.5 11.3
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110	113.7 104.1 106.4 112.8 116.5 112.8 113.5	123.2 116.1 117.8 122.5 125.2 122.5 123.1	1.022 1.009 1.013 1.018 .995 1.004 1.002	2.8 6.8 3.3 3.8 4.3 4.0 2.3	11.4 10.5 10.8 11.5 11.3 11.4
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3	1.022 1.009 1.013 1.018 .995 1.004 1.002	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8	11.4 10.5 10.8 11.5 11.3 11.4 10.8
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3 123.2	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3 123.2 131.4	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71  Tamcot 788	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3 112.6	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3 123.2 131.4 122.4	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016 .984 1.023	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0 2.3	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6 11.5
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71  Tamcot 788  Paymaster 785	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3 112.6 112.0	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3 123.2 131.4 122.4 121.9	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016 .984 1.023 1.007	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0 2.3 6.3	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6 11.5 11.3
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71  Tamcot 788  Paymaster 785  Lankart LX 571	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3 112.6 112.0 141.9	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3 123.2 131.4 122.4 121.9 142.8	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016 .984 1.023 1.007	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0 2.3 6.3 5.8	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6 11.5 11.3 13.5
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71  Tamcot 788  Paymaster 785  Lankart LX 571  Stripper 31A	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3 112.6 112.0 141.9 106.7	123.2 116.1 117.8 122.5 125.2 125.2 123.1 119.3 123.2 131.4 122.4 121.9 142.8 118.1	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016 .984 1.023 1.007 .952 1.017	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0 2.3 6.3 5.8 7.0	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6 11.5 11.3 13.5 10.9
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71  Tamcot 788  Paymaster 785  Lankart LX 571  Stripper 31A  Dunn 119	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3 112.6 112.0 141.9 106.7 139.6	123.2 116.1 117.8 122.5 125.2 122.5 123.1 119.3 123.2 131.4 122.4 121.9 142.8 118.1 141.3	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016 .984 1.023 1.007 .952 1.017	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0 2.3 6.3 5.8 7.0	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6 11.5 11.3 13.5 10.9 13.1
Westburn M  Tamcot Sp-21S  Pioneer Brand 1140  Lockett 77  Paymaster 303  Deltapine SR-2  Coker 5110  Coker 310  Western 44  GSA 71  Tamcot 788  Paymaster 785  Lankart LX 571  Stripper 31A	113.7 104.1 106.4 112.8 116.5 112.8 113.5 108.4 113.8 125.3 112.6 112.0 141.9 106.7	123.2 116.1 117.8 122.5 125.2 125.2 123.1 119.3 123.2 131.4 122.4 121.9 142.8 118.1	1.022 1.009 1.013 1.018 .995 1.004 1.002 .994 1.016 .984 1.023 1.007 .952 1.017	2.8 6.8 3.3 3.8 4.3 4.0 2.3 2.8 1.8 5.0 2.3 6.3 5.8 7.0	11.4 10.5 10.8 11.5 11.3 11.4 10.8 11.6 12.6 11.5 11.3 13.5 10.9

Table 87. Plains test: Yield, boll and yarn tenacity data for Altus, Okla.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
21 2 1 11/0	0/2	( ) /	22.0	10.0	150
Pioneer Brand 1140	843 a	6.14	33.9	12.0	150
Stoneville 213	821 a	5.66	33.8	11.5	132
GSA 71	770 ab	6.06	34.4	12.5	124
Tamcot Sp-21S	767 ab	5.86	33.4	12.0	140
Westburn M	753 abc	5.72	36.8	12.5	134
Lockett 77	728 bcd	6.08	35.1	12.5	151
Coker 5110	713 bcde	5.78	33.4	13.0	160
Tamcot 788	710 bcde	5.92	33.8	13.0	172
Deltapine SR-2	701 bcde	5.92	33.3	11.5	148
Coker 310	695 bcde	5.66	30.6	11.5	143
Stripper 31A	683 bcde	5.22	34.1	12.5	106
Paymaster 266	667 cde	6.30	33.3	14.0	158
Lankart LX 571	653 def	7.02	34.9	13.5	125
Dunn 119	640 def	6.22	33.3	14.5	162
Western 44	638 def	6.04	32.7	12.5	148
Paymaster 303	628 ef	6.06	33.3	14.0	133
Paymaster 785	569 f	5.64	35.5	14.0	134
Acala SJ-5	424 g	6.88	35.5	14.5	180

Table 88. Plains test: Fiber data for Altus, Okla.

Variety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Pioneer Brand 1140	1.07	0.52	200	6.0	5.00
Stoneville 213	1.10	.52	190	6.6	5.30
GSA 71	1.00	•50	188	6.3	5.45
Tamcot Sp-21S	1.09	•53	180	7.6	4.44
Westburn M	1.03	•50	176	7.1	4.95
ockett 77 ·····	1.04	•50	178	6.0	4.65
Coker 5110	1.16	•57	204	6.8	4.80
amcot 788	1.07	•52	200	5.6	4.60
eltapine SR-2	1.08	•52	209	6.2	5.10
oker 310	1.11	•52	237	5.6	5.15
	•92	.47	180	6.0	6.55
Stripper 31A			202		
Paymaster 266	1.02	.54		6.3	5.40
Lankart LX 571	1.04	•52	176	6.7	5.25
ounn 119	1.10	•54	228	5.6	4.90
Western 44	1.02	•51	178	6.0	4.85
aymaster 303	1.06	•50	192	6.0	5.10
'aymaster 785	.94	•48	176	6.2	5.70
cala SJ-5	1.13	•57	248	5.7	4.60
		h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_{d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Pioneer Brand 1140	1.08	84.0	21.5	70.0	10.0
Stoneville 213	1.10	84.5	21.0	69.5	9.8
SA 71 ·······	1.01	83.5	21.5	65.8	10.3
			23.0		10.8
amcot Sp-21S	1.12	82.5		71.5	
estburn M	1.06	83.0	22.0	67.0	10.9
ockett 77	1.10	84.0	21.0	71.8	10.7
oker 5110	1.17	86.0	24.0	68.2	10.4
amcot 788	1.06	83.5	22.5	69.5	10.2
eltapine SR-2	1.08	84.0	22.5	65.2	10.8
oker 310	1.14	82.5	23.0	69.2	11.0
tripper 31A	.92	82.5	21.5	67.8	9.8
aymaster 266	1.00	86.0	23.0	65.8	10.9
ankart LX 571	1.02	84.0	22.0	68.0	11.1
Ounn 119	1.12	84.5	26.5	59.2	8.8
Western 44	1.00	83.5	20.0	69.2	10.0
2	1.05	83.0	22.5	69.2	11.3
aymaster 303	2 4 0 3				
Paymaster 303 Paymaster 785	•96	83.0	20.5	66.2	11.6

Table 89. Plains test: Seed data for Altus, Okla.

Variety	0il (percent)	Nitrogen (percent)	Free ° gossypol (percent)	Linters (percent)	Seed grade
Pioneer Brand 1140	20.9	3.22	0.60	10.4	5.0
Stoneville 213	18.4	3.02	.82	14.2	3.0
GSA 71	18.7	3.33	• 54	11.7	4.0
Tamcot Sp-21S	18.7	3.39	•56	8.7	4.5
Westburn M	18.8	3.43	• 59	10.9	5.0
Lockett 77	19.4	3.37	.46	11.7	4.5
Coker 5110	19.8	3.11	.70	11.8	4.0
Tamcot 788	19.6	3.36	•46	11.0	4.0
Deltapine SR-2	19.9	3.15	• 55	9.7	5.0
Coker 310	19.8	3.09	.77	13.5	4.0
Stripper 31A	19.4	3.39	•62	10.9	4.5
Paymaster 266	19.0	3.18	•52	10.8	4.0
Lankart LX 571	18.6	3.43	.42	10.1	4.5
Dunn 119	17.7	3.21	.41	13.9	3.0
Western 44	19.4	3.52	• 48	10.4	5.0
Paymaster 303	20.3	3.17	•66	11.4	4.5
Paymaster 785	18.4	3.43	.48	10.9	4.5
Acala SJ-5	19.3	3.13	•46	12.7	3.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Pioneer Brand 1140	102.5	115.0	1.026	2.5	10.5
Stoneville 213	97.8	111.4	•982	4.8	9.6
Stoneville 213 GSA 71	97.8 123.6	111.4 130.2	•982 •985	4.8 6.5	9.6 12.1
Stoneville 213 GSA 71 Tamcot Sp-21S	97.8 123.6 103.6	111.4 130.2 115.8	.982 .985 1.005	4.8 6.5 6.0	9.6 12.1 10.4
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M	97.8 123.6 103.6 109.2	111.4 130.2 115.8 119.9	.982 .985 1.005 1.030	4.8 6.5 6.0 3.8	9.6 12.1 10.4 11.3
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77	97.8 123.6 103.6 109.2 111.2	111.4 130.2 115.8 119.9 121.4	.982 .985 1.005 1.030 1.025	4.8 6.5 6.0 3.8 2.8	9.6 12.1 10.4 11.3 11.4
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110	97.8 123.6 103.6 109.2 111.2	111.4 130.2 115.8 119.9 121.4 121.3	.982 .985 1.005 1.030 1.025 1.013	4.8 6.5 6.0 3.8 2.8 1.8	9.6 12.1 10.4 11.3 11.4 10.7
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788	97.8 123.6 103.6 109.2 111.2 111.1	111.4 130.2 115.8 119.9 121.4 121.3	.982 .985 1.005 1.030 1.025 1.013	4.8 6.5 6.0 3.8 2.8 1.8	9.6 12.1 10.4 11.3 11.4 10.7 11.2
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9	.982 .985 1.005 1.030 1.025 1.013 1.030 .993	4.8 6.5 6.0 3.8 2.8 1.8 1.8	9.6 12.1 10.4 11.3 11.4 10.7 11.2
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A  Paymaster 266	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0 116.9	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018 1.006	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5 11.0
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A  Paymaster 266  Lankart LX 571	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0 116.9 141.4	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7 125.4 142.4	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018 1.006 .952	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0 3.5 4.3	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5 11.0 11.8
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A  Paymaster 266  Lankart LX 571  Dunn 119	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0 116.9 141.4 137.5	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7 125.4 142.4 139.8	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018 1.006 .952	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0 3.5 4.3	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5 11.0 11.8 13.7
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A  Paymaster 266  Lankart LX 571  Dunn 119  Western 44	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0 116.9 141.4 137.5 111.9	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7 125.4 142.4 139.8 121.8	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018 1.006 .952 .928 1.033	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0 3.5 4.3 13.5 2.5	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5 11.0 11.8 13.7 12.7 11.5
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A  Paymaster 266  Lankart LX 571  Dunn 119  Western 44  Paymaster 303	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0 116.9 141.4 137.5 111.9	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7 125.4 142.4 139.8 121.8 122.5	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018 1.006 .952 .928 1.033 1.008	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0 3.5 4.3 13.5 2.5 2.8	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5 11.0 11.8 13.7 12.7 11.5 11.4
Stoneville 213  GSA 71  Tamcot Sp-21S  Westburn M  Lockett 77  Coker 5110  Tamcot 788  Deltapine SR-2  Coker 310  Stripper 31A  Paymaster 266  Lankart LX 571  Dunn 119  Western 44	97.8 123.6 103.6 109.2 111.2 111.1 108.5 112.0 105.7 109.0 116.9 141.4 137.5 111.9	111.4 130.2 115.8 119.9 121.4 121.3 119.4 121.9 117.4 119.7 125.4 142.4 139.8 121.8	.982 .985 1.005 1.030 1.025 1.013 1.030 .993 1.019 1.018 1.006 .952 .928 1.033	4.8 6.5 6.0 3.8 2.8 1.8 1.8 3.0 2.3 5.0 3.5 4.3 13.5 2.5	9.6 12.1 10.4 11.3 11.4 10.7 11.2 11.1 10.5 11.0 11.8 13.7 12.7 11.5

Table 90. Plains test: Yield, boll and yarn tenacity data for Lubbock, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
					<del></del>
Tamcot 788	689 a	4.90	34.4	10.6	158
Pioneer Brand 1140	678 ab	4.89	35.6	10.9	134
Dunn 119	675 ab	5.19	32.7	14.2	160
Paymaster 303	663 abc	4.72	35.2	11.3	128
Coker 310	656 abc	4.82	35.2	11.0	150
Tamcot Sp-21S	655 abcd	4.72	36.2	11.1	130
Stripper 31A	650 abcd	4.33	32.6	11.1	112
Stoneville 213	636 abcde	3.99	33.9	10.1	136
Paymaster 785	632 abcde	4.54	36.4	11.3	126
Westburn M	626 abcde	4.86	34.0	11.1	130
GSA 71	624 abcde	4.48	35.0	11.9	131
Lockett 77	609 abcde	4.75	35.1	11.1	134
Coker 5110	603 abcde	4.52	34.3	11.2	142
Western 44	600 abcde	4.32	33.4	10.9	137
Deltapine SR-2	590 bcde	4.59	33.8	10.6	141
Lankart LX 571	572 cde	5.57	35.3	13.7	132
Paymaster 266	559 de	4.60	33.4	11.1	148
Acala SJ-5	546 e	5.13	33.9	12.1	176

Table 91. Plains test: Fiber data for Lubbock, Tex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Tamcot 788	1.06	0.46	198	5.6	3.75
Pioneer Brand 1140	1.02	•46	186	6.8	4.00
ounn 119	1.12	•52	208	5.7	4.50
aymaster 303	1.02	•46	177	6.2	4.05
Soker 310	1.09	.47	193	6.1	4.00
amcot Sp-21S ····	1.04	• 46	172	8.2	3.65
tripper 31A	.94	.44	156	6.6	5.30
toneville 213	1.06	•46	179	6.8	3.80
aymaster 785	•93	•45	180	6.9	4.65
estburn M	1.02	.44	176	7.8	3.95
SA 71 ······	1.00	•45	190	6.4	4.20
ockett 77	1.00	•45	182	6.4	3.85
oker 5110	1.09	•46	196	6.1	4.00
estern 44 ·····	.98	•46	178	6.6	
					3.85
eltapine SR-2	1.02	•46	186	5.9	4.35
ankart LX 571	1.04	.48	172	6.7	4.40
aymaster 266	1.02	•50	210	7.2	4.05
cala SJ-2	1.16	•55	221	6.0	3.85
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Camp of 788	1 06	80 S	25 5	7/1 Q	11 7
	1.06	80.5	25.5	74.8	11.7
ioneer Brand 1140	1.04	81.0	24.0	74.0	11.3
ioneer Brand 1140 unn 119	1.04 1.15	81.0 82.5	24.0 28.0	74.0 76.2	11.3 10.9
ioneer Brand 1140 unn 119 aymaster 303	1.04 1.15 1.00	81.0 82.5 80.0	24.0 28.0 24.0	74.0 76.2 73.5	11.3 10.9 11.4
ioneer Brand 1140 unn 119 aymaster 303 oker 310	1.04 1.15 1.00 1.12	81.0 82.5 80.0 80.5	24.0 28.0 24.0 24.0	74.0 76.2 73.5 77.2	11.3 10.9 11.4 10.5
ioneer Brand 1140 unn 119 aymaster 303 oker 310 amcot Sp-21S	1.04 1.15 1.00 1.12 1.03	81.0 82.5 80.0 80.5 79.5	24.0 28.0 24.0 24.0 23.5	74.0 76.2 73.5 77.2 76.8	11.3 10.9 11.4 10.5 11.1
ioneer Brand 1140 unn 119  aymaster 303  oker 310  amcot Sp-21S  tripper 31A	1.04 1.15 1.00 1.12 1.03	81.0 82.5 80.0 80.5 79.5 82.0	24.0 28.0 24.0 24.0 23.5 21.5	74.0 76.2 73.5 77.2 76.8 71.8	11.3 10.9 11.4 10.5 11.1
ioneer Brand 1140 unn 119 aymaster 303 oker 310 amcot Sp-21S tripper 31A toneville 213	1.04 1.15 1.00 1.12 1.03 .92 1.08	81.0 82.5 80.0 80.5 79.5 82.0 80.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5	74.0 76.2 73.5 77.2 76.8 71.8	11.3 10.9 11.4 10.5 11.1 11.5
ioneer Brand 1140 unn 119  aymaster 303 oker 310  amcot Sp-21S tripper 31A toneville 213 aymaster 785	1.04 1.15 1.00 1.12 1.03 .92 1.08	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7	11.3 10.9 11.4 10.5 11.1 11.5 11.9
ioneer Brand 1140 unn 119  aymaster 303 oker 310 amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8
ioneer Brand 1140 unn 119  aymaster 303 oker 310  amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M SA 71	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92 1.02 1.00	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8
ioneer Brand 1140 unn 119  aymaster 303 oker 310  amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M SA 71	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5 80.0 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8 10.4
ioneer Brand 1140 unn 119  aymaster 303 oker 310  amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M SA 71 ockett 77	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92 1.02 1.00	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8
ioneer Brand 1140 unn 119  aymaster 303 oker 310  amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M SA 71 ockett 77 oker 5110	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92 1.02 1.00	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5 80.0 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8 10.4
ioneer Brand 1140 unn 119  aymaster 303 oker 310  amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M SA 71 ockett 77 oker 5110 estern 44	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92 1.02 1.00 1.00	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5 80.0 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5 22.5 25.0	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2 71.5 69.2	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8 10.4 10.1
ioneer Brand 1140 unn 119 aymaster 303 oker 310 amcot Sp-21S tripper 31A toneville 213 aymaster 785 estburn M SA 71 ockett 77 oker 5110 estern 44 eltapine SR-2	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92 1.02 1.00 1.00	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5 80.0 81.5 80.0	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5 24.5 23.5 24.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2 71.5 69.2 73.8	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8 10.4 10.1 10.9 11.4
amcot 788  ioneer Brand 1140  unn 119  aymaster 303  amcot Sp-21S  tripper 31A  toneville 213  aymaster 785  sextburn M  SA 71  cockett 77  coker 5110  destern 44  eltapine SR-2  ankart LX 571  aymaster 266	1.04 1.15 1.00 1.12 1.03 .92 1.08 .92 1.02 1.00 1.00 1.12 .98 1.04	81.0 82.5 80.0 80.5 79.5 82.0 80.5 81.5 80.0 81.5 80.0 81.5	24.0 28.0 24.0 24.0 23.5 21.5 25.5 23.5 24.5 23.5 24.5 23.5 24.5 23.5	74.0 76.2 73.5 77.2 76.8 71.8 75.8 70.7 73.2 71.2 71.5 69.2 73.8	11.3 10.9 11.4 10.5 11.1 11.5 11.9 12.5 11.8 10.4 10.1 10.9 11.4 11.4

Table 92. Plains test: Yield, boll and yarn tenacity data for Lamesa, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
	0.7.4		00.7	400	
Pioneer Brand 1140	274 a	4.71	33.7	10.2	134
Tamcot Sp-21S	265 ab	4.04	33.9	9.5	132
Coker 310	248 ab	4.45	35.1	9.9	142
Lockett 77	243 ab	4.17	34.3	9.8	140
GSA 71	240 ab	4.66	32.7	11.5	128
Stoneville 213	236 ab	4.32	33.9	9.8	144
Deltapine SR-2	228 abc	3.79	32.3	9.8	143
Dunn 119	222 abc	5.12	32.4	13.2	157
Paymaster 303	215 abc	4.33	33.1	10.8	130
Western 44	211 abc	4.14	33.4	10.1	134
Westburn M	203 abc	4.80	33.1	10.5	126
Stripper 31A	198 abc	3.95	32.1	9.0	116
Acala SJ-5	176 abc	4.30	33.4	11.3	177
Coker 5110	165 abc	4.14	33.3	9.9	137
Paymaster 266	160 bc	3.50	31.9	10.4	150
Paymaster 785	157 bc	3.59	34.5	10.2	118
Lankart LX 571	153 bc	4.66	34.5	11.5	124
Tamcot 788	122 c	4.31	35.3	9.0	144

Table 93. Plains test: Fiber data for Lamesa, Tex.

ariety	Digital F	ibrograph	Stelo	meter	Micronair
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Pioneer Brand 1140	1.00	0.46	193	6.4	3.80
amcot Sp-21S	1.00	.44	175	7.4	3.85
oker 310	1.04	.46	202	6.0	4.00
ockett 77	•96	.43	181	6.4	3.55
SA 71	•96	•46	180	7.2	4.30
coneville 213	1.01	.48	193	8.0	4.00
ltapine SR-2	.98	•46	193	6.4	4.10
nn 119	1.06	.48	208	6.3	4.05
ymaster 303	•98	.45	177	5.8	3.95
stern 44	•94	.42	187	6.4	3.40
stburn M	•98	.43	181	7.2	3.65
ripper 31A	•92	.43	182	6.2	4.70
ala SJ-5	1.08	•51	238	6.2	3.40
ker 5110	1.03	.46	177	6.2	3.90
ymaster 266	.97	.47	204	6.8	3.60
ymaster 785	.89	•44	175	7.0	4.25
nkart LX 571	•98	.45	183	7.1	3.70
mcot 788 ·····	.96	.42	188	5.4	3.35
		• • •			
		h Volume Instru	ument C		rimeter
	UHM	Uniformity	Tenacity	$R_{d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
oneer Brand 11/0		81 5	24 0	73.5	11.7
	0.98	81.5	24.0	73.5	11.7
mcot Sp-21S ····	0.98	80.5	23.5	75.5	11.9
mcot Sp-21S ker 310	0.98 1.00 1.04	80.5 81.0	23.5 22.5	75.5 76.5	11.9 11.9
mcot Sp-21S ker 310 ckett 77	0.98 1.00 1.04 .96	80.5 81.0 80.0	23.5 22.5 23.0	75.5 76.5 69.0	11.9 11.9 10.9
mcot Sp-21S ker 310 ckett 77 A 71	0.98 1.00 1.04 .96	80.5 81.0 80.0 82.0	23.5 22.5 23.0 23.5	75.5 76.5 69.0 70.0	11.9 11.9 10.9 11.8
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213	0.98 1.00 1.04 .96 .96 1.02	80.5 81.0 80.0 82.0 82.0	23.5 22.5 23.0 23.5 25.0	75.5 76.5 69.0 70.0 74.0	11.9 11.9 10.9 11.8 12.7
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213 ltapine SR-2	0.98 1.00 1.04 .96 .96 1.02 1.00	80.5 81.0 80.0 82.0 82.0	23.5 22.5 23.0 23.5 25.0 25.0	75.5 76.5 69.0 70.0 74.0 71.5	11.9 11.9 10.9 11.8 12.7
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213 ltapine SR-2 nn 119	0.98 1.00 1.04 .96 .96 1.02 1.00	80.5 81.0 80.0 82.0 82.0 82.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0	11.9 11.9 10.9 11.8 12.7 12.3
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213 ltapine SR-2 nn 119 ymaster 303	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10	80.5 81.0 80.0 82.0 82.0 82.0 82.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213 ltapine SR-2 nn 119 ymaster 303 stern 44	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96	80.5 81.0 80.0 82.0 82.0 82.0 82.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.0	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213 ltapine SR-2 nn 119 ymaster 303 stern 44 stburn M	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90	80.5 81.0 80.0 82.0 82.0 82.0 82.0 80.5 79.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3
mcot Sp-21S ker 310 A 71 oneville 213 eltapine SR-2 mn 119 symaster 303 estern 44 estburn M aripper 31A	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90 .98	80.5 81.0 80.0 82.0 82.0 82.0 82.0 80.5 79.0 80.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.0 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3 12.1
mcot Sp-21S ker 310 ckett 77 A 71 oneville 213 eltapine SR-2 mn 119 symaster 303 estern 44 estburn M ripper 31A	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90 .98 .87 1.07	80.5 81.0 80.0 82.0 82.0 82.0 82.0 80.5 79.0 80.0 81.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.5 23.0 23.5 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5 74.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3 12.1 10.8 12.4
mcot Sp-21S ker 310 A 71 oneville 213 ltapine SR-2 symaster 303 estern 44 stburn M ripper 31A ala SJ-5	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90 .98	80.5 81.0 80.0 82.0 82.0 82.0 82.0 80.5 79.0 80.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.0 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3 12.1 10.8 12.4
cker 310  A 71  coneville 213  cltapine SR-2  cltapine SR-2	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90 .98 .87 1.07	80.5 81.0 80.0 82.0 82.0 82.0 82.0 80.5 79.0 80.0 81.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.5 23.0 23.5 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5 74.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3 12.1 10.8 12.4
cket 310 cket 77 char 71 coneville 213 cltapine SR-2 cltapin	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90 .98 .87 1.07 1.05	80.5 81.0 80.0 82.0 82.0 82.0 80.5 79.0 80.0 81.0 82.5	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.0 23.5 23.0 27.5 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5 74.5 77.0 72.2	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3 12.1 10.8 12.4
ioneer Brand 1140 amcot Sp-21S oker 310 ockett 77 SA 71 toneville 213 eltapine SR-2 unn 119 aymaster 303 estern 44 estburn M tripper 31A cala SJ-5 oker 5110 aymaster 266 aymaster 785 ankart LX 571	0.98 1.00 1.04 .96 .96 1.02 1.00 1.10 .96 .90 .98 .87 1.07 1.05 .94	80.5 81.0 80.0 82.0 82.0 82.0 80.5 79.0 80.0 81.0 82.5 81.0 82.0	23.5 22.5 23.0 23.5 25.0 25.0 28.5 23.5 23.0 23.5 23.0 27.5 23.5 23.5	75.5 76.5 69.0 70.0 74.0 71.5 72.0 72.5 71.8 74.5 74.5 77.0 72.2 75.5	11.9 11.9 10.9 11.8 12.7 12.3 11.6 11.8 11.3 12.1 10.8 12.4 12.5 12.1

Table 94. Plains test: Yield, boll and yarn tenacity data for Mangum, Okla.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Westburn M	197 a	6.14	35.1	12.0	126
Pioneer Brand 1140	184 ab	6.02	34.0	12.5	149
Coker 5110	179 ab	5.64	32.5	13.0	156
Tamcot 788	175 abc	5.38	32.1	13.0	163
Tamcot Sp-21S	158 abcd	5.46	35.7	10.0	134
Lockett 77	158 abcd	5.54	35.4	11.0	149
Lankart LX 571	155 abcd	6.68	34.2	14.0	132
Paymaster 785	155 abcd	5.62	38.7	11.5	130
Deltapine SR-2	152 abcde	5.54	31.7	11.5	146
Coker 310	118 abcdef	5.50	32.5	12.0	152
Stoneville 213	114 abcdef	4.90	32.9	11.0	137
Western 44	95 bcdef	5.62	35.4	12.0	145
GSA 71	88 cdef	5.96	32.3	12.5	135
Stripper 31A	83 def	5.26	30.9	10.5	112
Paymaster 303	79 def	5.38	33.5	13.0	143
Dunn 119	71 def	6.16	31.0	16.0	176
Paymaster 266	64 ef	5.26	32.5	12.5	147
Acala SJ-5	60 f	6.06	33.7	13.0	194

Table 95. Plains test: Fiber data for Mangum, Okla.

Variety	Digital F		Stelo	Stelometer	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E1 (percent)	reading
Westburn M	1.03	0.50	196	7.2	5.05
Pioneer Brand 1140	1.09	•52	200	6.0	4.80
Coker 5110	1.16	•56	210	5.7	5.05
amcot 788	1.10	•52	217	5.6	4.60
amcot Sp-21S	1.11	•54	200	7.4	4.15
ockett 77	1.07	•50	204	6.0	4.80
ankart LX 571	1.08	•54	184	7.2	5.15
aymaster 785	.98	•50	192	6.4	5.50
eltapine SR-2	1.08	•52	210	5.5	5.30
oker 310	1.14	.54	214	5.6	4.95
toneville 213	1.13	•53	211	5.9	5.10
estern 44	1.02	.49	206	6.4	4.65
SA 71	1.04	•50	206	6.9	4.85
	•92	•46	188	5.6	6.05
tripper 31A	1.02	.48	222	5.2	5.00
aymaster 303			249		
unn 119	1.13	•56		5.6	5.35
aymaster 266	1.02	•52	216	6.4	5.40
cala SJ-5	1.18	•58	245	6.0	4.40
		High Volume Instrument			rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		<i>b</i> value
estburn M	1.04				
COLDUIN II COLOUR	1 4 1 1 4	83.5	21.5	70.0	11.2
ioneer Brand 1140		83.5 84.5	21.5	70.0 71.8	11.2 9.5
	1.14	84.5	26.5	71.8	9.5
oker 5110	1.14 1.20	84.5 84.0	26.5 25.5	71.8 69.8	9.5 11.0
oker 5110 amcot 788	1.14 1.20 1.12	84.5 84.0 82.5	26.5 25.5 25.5	71.8 69.8 65.8	9.5 11.0 9.9
oker 5110 amcot 788 amcot Sp-21S	1.14 1.20 1.12 1.10	84.5 84.0 82.5 82.5	26.5 25.5 25.5 20.5	71.8 69.8 65.8 69.8	9.5 11.0 9.9 10.6
oker 5110  amcot 788  amcot Sp-21S  ockett 77	1.14 1.20 1.12 1.10 1.08	84.5 84.0 82.5 82.5 83.0	26.5 25.5 25.5 20.5 32.0	71.8 69.8 65.8 69.8 70.0	9.5 11.0 9.9 10.6 10.3
oker 5110	1.14 1.20 1.12 1.10 1.08 1.08	84.5 84.0 82.5 82.5 83.0 84.0	26.5 25.5 25.5 20.5 32.0 23.5	71.8 69.8 65.8 69.8 70.0 68.0	9.5 11.0 9.9 10.6 10.3 10.6
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785	1.14 1.20 1.12 1.10 1.08 1.08	84.5 84.0 82.5 82.5 83.0 84.0	26.5 25.5 25.5 20.5 32.0 23.5 23.0	71.8 69.8 65.8 69.8 70.0 68.0 66.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785  eltapine SR-2	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10	84.5 84.0 82.5 82.5 83.0 84.0 83.0	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785  eltapine SR-2  oker 310	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10	84.5 84.0 82.5 82.5 83.0 84.0 83.0 84.5	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0 23.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785  eltapine SR-2  oker 310  toneville 213	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18	84.5 84.0 82.5 82.5 83.0 84.0 83.0 84.5 85.0	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0 23.5 24.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785  eltapine SR-2  oker 310  toneville 213  estern 44	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18 1.16 1.00	84.5 84.0 82.5 82.5 83.0 84.0 83.0 84.5 85.0 84.0	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0 23.5 24.5 23.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2 67.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7
oker 5110	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18 1.16 1.00 1.08	84.5 84.0 82.5 82.5 83.0 84.0 83.0 84.5 85.0 84.0 84.5	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0 23.5 24.5 24.5 23.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2 67.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7 10.6 10.5
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785  eltapine SR-2  oker 310  toneville 213  estern 44  SA 71  tripper 31A	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18 1.16 1.00 1.08	84.5 84.0 82.5 82.5 83.0 84.0 83.0 84.5 85.0 84.5 85.0 84.5	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0 23.5 24.5 23.5 19.5 21.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2 67.2 67.2	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7 10.6 10.5 10.4
oker 5110  amcot 788  amcot Sp-21S  ockett 77  ankart LX 571  aymaster 785  eltapine SR-2  oker 310  toneville 213  estern 44  SA 71  tripper 31A  aymaster 303	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18 1.16 1.00 1.08 .94 1.04	84.5 84.0 82.5 83.0 84.0 83.0 84.5 85.0 84.5 85.0 84.0 84.5	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.5 24.5 23.5 19.5 21.5 23.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2 67.2 69.5 67.7 66.5	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7 10.6 10.5 10.4
oker 5110	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18 1.16 1.00 1.08 .94 1.04 1.18	84.5 84.0 82.5 82.5 83.0 84.0 83.0 84.5 85.0 84.5 85.0 84.5 83.0 84.5	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.0 23.5 24.5 23.5 19.5 21.5 23.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2 67.2 67.2 69.5 67.7 66.5 66.8	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7 10.6 10.5 10.4 11.3
ioneer Brand 1140 oker 5110 amcot 788 ockett 77 ockett 77 ankart LX 571 aymaster 785 oker 310 toneville 213 estern 44 SA 71 tripper 31A aymaster 303 tripper 31A aymaster 303 aymaster 266	1.14 1.20 1.12 1.10 1.08 1.08 .95 1.10 1.18 1.16 1.00 1.08 .94 1.04	84.5 84.0 82.5 83.0 84.0 83.0 84.5 85.0 84.5 85.0 84.0 84.5	26.5 25.5 25.5 20.5 32.0 23.5 23.0 23.5 24.5 23.5 19.5 21.5 23.5	71.8 69.8 65.8 69.8 70.0 68.0 66.2 68.2 67.2 67.2 69.5 67.7 66.5	9.5 11.0 9.9 10.6 10.3 10.6 10.9 9.5 10.4 10.7 10.6 10.5 10.4

Table 96. Plains test: Seed data for Mangum, Okla.

10.0		(percent)		
19.0	3.46	0.72	10.8	5.0
20.6	3.12	.65	11.3	5.0
19.8	3.15	.73	12.3	4.0
19.2	3.29	•57	11.4	4.0
18.7	3.34	•53	10.5	5.0
19.3	3.35	.61	12.5	4.5
18.7	3.41	• 46	11.4	5.0
				4.0
				5.0
				3.5
				4.0
				5.0
				5.0
				4.5
				4.0
				3.0
				4.0
17.4	J•21	• > /	12.0	3.0
Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed inde
		(8/0)		¢ Index
112.1	122.0	1.012	1.8	11.3
105.1	116.9	1.009	2.8	10.6
113.7	123.2	1.011	1.5	11.3
115.7	124.6	1.009	2.5	11.4
104.7	116.6	•983	4.8	10.3
110.6	120.9	1.004	3.0	11.3
139.2	140.9	.943	5.0	13.1
115.0	124.1	.982	6.5	11.3
116.7	125.4	•981	4.0	11.1
106.8	118.2	1.015	3.8	10.8
99.1	112.4	•995	4.3	9.9
114.9	124.0	1.031	1.0	11.8
				12.2
				10.9
				11.4
				13.1
				11.4
113.5	123.0	•985	8.8	11.2
	19.2 18.7 19.3 18.7 18.7 20.0 20.0 17.8 19.5 18.8 18.9 20.7 18.0 18.8 19.4  Seed volume (mm³)  112.1 105.1 113.7 115.7 104.7 110.6 139.2 115.0 116.7 106.8 99.1	19.2 18.7 3.34 19.3 3.35 18.7 3.41 18.7 20.0 3.19 20.0 3.15 17.8 3.03 19.5 3.56 18.8 3.40 18.9 3.35 20.7 3.25 18.0 3.36 18.8 3.16 19.4 3.21  Seed Seed volume (mm³) area (mm²)  112.1 122.0 105.1 116.9 113.7 123.2 115.7 124.6 104.7 116.6 110.6 120.9 139.2 140.9 115.0 124.1 116.7 125.4 106.8 118.2 99.1 112.4 114.9 124.0 126.3 132.1 108.6 119.5 115.0 124.1 143.2	19.2	19.2 18.7 3.34 .53 10.5 19.3 3.35 .61 12.5 18.7 3.41 .46 11.4 18.7 3.47 .57 13.5 20.0 3.19 .43 9.7 20.0 3.15 .90 12.9 17.8 3.03 .84 12.9 19.5 3.56 .71 10.0 18.8 3.40 .69 12.1 18.9 3.35 .85 11.7 20.7 3.25 .78 11.5 18.0 3.36 .62 14.1 18.8 3.16 .57 13.0 19.4 3.21 .57 12.6  Seed Seed Seed Gensity (percent) (mm³) area (mm²) (g/cm³)  112.1 122.0 1.012 1.8 105.1 116.9 1.009 2.8 113.7 123.2 1.011 1.5 115.7 124.6 1.009 2.5 104.7 116.6 2.983 4.8 110.6 139.2 140.9 1.004 3.0 139.2 140.9 1.943 5.0 115.0 124.1 1.982 6.5 116.7 125.4 981 4.0 106.8 118.2 1.015 3.8 99.1 112.4 1995 4.3 114.9 124.0 1.031 1.0 2.8 1143.2 143.6 1916 11.00 2.8 1143.2 143.6 1100 2.8 1143.2 143.6

## WESTERN REGIONAL COTTON VARIETY TEST

Table 97. Western test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310 Deltapine 61	1152 a	6.41 ab	38.7 ab	11.8 de	138 cd
	1105 a	5.75 cde	37.6 bc	11.5 e	132 de
Stoneville 213	1103 a 1102 a 1081 ab	6.08 bcd	37.3 bc	12.3 cd	126 e
McNair 220 Acala 1517-75	991 bc	5.59 e 6.29 b	38.5 ab 36.7 c	11.4 e 14.0 a	142 c 166 b
Acala 1517-77 Acala SJ-5	988 bc	6.14 bc	34.7 d	13.2 b	175 a
	972 c	6.65 a	38.1 abc	12.8 bc	166 b
Paymaster 303 Tamcot Sp-21	921 c	6.22 b	37.5 bc	12.6 bc	127 e
	785 d	5.70 de	39.3 a	11.3 e	130 de

Table 98. Western test: Fiber data by cotton variety

Variety	Digital F	ibrograph	Stelo	meter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
					<del></del>	
Coker 310	1.12 bc	0.51 ъ	180 cd	6.6 cd	4.40 abc	
Deltapine 61	1.13 ab	.51 Ъ	192 c	8.7 a	4.52 ab	
Stoneville 213	1.09 cd	.50 Ъ.	175 d	7.7 ъ	4.63 a	
McNair 220	1.07 de	.50 ъ	179 cd	6.5 d	4.52 ab	
Acala 1517-75	1.16 a	•55 a	209 Ъ	6.9 cd	4.13 c	
Acala 1517-77	1.16 a	.55 a	228 a	6.6 cd	4.32 abc	
Acala SJ-5	1.12 bc	.54 a	215 ab	6.7 cd	4.25 bc	
Paymaster 303	1.08 de	.49 Ъ	174 d	6.7 cd	4.25 bc	
Tamcot Sp-21	1.06 e	.49 ъ	180 cd	7.1 c	4.25 bc	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$R_d$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
Coker 310	1.15 abc	82.8 cd	22.3 cd	63.8 a	10.0 ab	
Deltapine 61	1.18 ab	83.5 bc	23.0 c	66.9 a	10.9 a	
Stoneville 213	1.11 cde	82.8 cd	21.2 de	62.9 a	10.8 ab	
McNair 220	1.10 def	82.8 cd	21.7 de	64.7 a	10.2 ab	
Acala 1517-75	1.19 a	85.0 a	25.3 b	68.1 a	9.3 b	
Acala 1517-77	1.20 a	85.0 a	26.7 a	65.6 a	9.3 b	
Acala SJ-5	1.14 bcd	84.0 b	25.2 b	65.7 a	10.1 ab	
Paymaster 303	1.08 ef	81.7 e	21.0 e	66.6 a	10.7 ab	
Tamcot Sp-21	1.06 f	82.5 d	20.7 e	66.2 a	9.9 ab	

Table 99. Western test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Las Cruces, N. Mex.	1067 a	6.26 5.93	37.2 a 37.9 a	12.7 a 11.9 a	NA 144 a
Artesia, N. Mex El Paso, Tex	965 a NA	NA	NA	NA	145 a
Pecos, Tex	NA	NA	NA	NA	144 a

NA, Data not available

Table 100. Western test: Fiber data by test location

Location	Digital F	ibrograph		meter	Micronaire
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex	1.13 a	0.52 ъ	196 a	7.4 a	4.30 a
El Paso, Tex	1.15 a	•54 a	187 Ъ	7.3 a	4.30 a
Pecos, Tex	1.05 b	.48 c	194 a	6.4 Ъ	4.48 a
	Hig	h Volume Instru	ment	Color	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex	1.14 b	83.1 b	24.3 a	65.8 a	10.2 a
El Paso, Tex	1.19 a	84.3 a	22.3 a	66.8 a	10.9 a
Pecos, Tex	1.06 c	82.7 b	22.4 a	64.2 a	9.3 a

NA, Data not available.

Table 101. Western test: Seed data by test location

Location	0il · (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex	20.2	3.43	0.78	11.1	5.3
El Paso, Tex	NA	NA	NA	NA	NA
Pecos, Tex	NA	NA	NA	NA	NA
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Las Cruces, N. Mex.	NA	NA	NA	NA	NA
Artesia, N. Mex	100.8	113.4	1.033	2.6	10.3
El Paso, Tex	NA	NA	NA	NA	NA
Pecos, Tex	NA	NA	NA	NA	NA

NA, Data not available.

Table 102. Western test: Yield, boll and yarn tenacity data for Las Cruces, N. Mex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Coker 310	1235 a	6.46	37.5	12.4	NA
Stoneville 213	1188 a	6.49	36.3	12.8	NA
Acala 1517-75	1162 a	6.59	36.6	14.4	NA
Deltapine 61	1124 ab	5.54	36.1	11.5	NA
McNair 220	1116 ab	5.98	38.5	11.8	NA
Acala 1517-77	1089 ab	6.38	34.8	13.7	NA
Acala SJ-5	997 bc	6.90	38.2	12.8	NA
Paymaster 303	870 cd	5.93	38 • 1	13.0	NA
Tamcot Sp-21	824 d	6.04	38.9	11.8	NA

NA, Data not available.

Table 103. Western test: Yield, boll and yarn tenacity data for Artesia, N. Mex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 61	1090 a	5.97	39.2	11.5	127
Coker 310	1085 a	6.37	39.8	11.3	137
McNair 220	1054 ab	5.20	38.5	11.0	144
Stoneville 213	1032 ab	5.67	38 • 2	11.8	122
Paymaster 303	962 abc	6.50	37.0	12.2	124
Acala SJ-5	951 abc	6.40	38.0	12.7	167
Acala 1517-77	908 bc	5.90	34.5	12.7	177
Acala 1517-75	853 cd	6.00	36.7	13.6	167
Tamcot Sp-21	754 d	5.37	39.8	10.7	134

Table 104. Western test: Fiber data for Artesia, N. Mex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Dalla and an (1	1 1/	0.52	107	0 2	/ /0
Deltapine 61	1.14	0.52	186	9.2	4.40
Coker 310	1.14	•51	178	6.9	4.40
McNair 220	1.08	• 49	180	6.8	4.45
Stoneville 213	1.10	•50	173	8.7	4.40
Paymaster 303	1.14	• 52	181	6.9	4.10
Acala SJ-5	1.13	•54	219	7.0	4.35
Acala 1517-77	1.18	• 55	246	7.2	4.35
Acala 1517-75	1.17	•56	206	7.4	4.25
Tamcot Sp-21	1.09	• 50	192	7.1	4.05
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Deltapine 61	1.20	83.0	24.5	64.5	11.8
Coker 310	1.18	2 83.0	23.0	65.8	9.9
McNair 220	1.08	82.0	23.0	65.8	
Stoneville 213					10.6
	1.12	82.5	21.5	67.5	11.5
Paymaster 303	1.10	81.5	22.0	66.5	10.1
Acala SJ-5	1.13	84.0	27.0	63.0	10.5
Acala 1517-77	1.20	85.5	28.5	63.8	9.2
Acala 1517-75	1.20	84.5	26.5	66.5	9.2
Tamcot Sp-21	1.08	82.0	22.5	68.5	8.6

Table 105. Western test: Seed data for Artesia, N. Mex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 61	19.1	3.33	0.75	11.7	5.0
Coker 310 ·····	20.2	3.61	•79	12.0	4.5
McNair 220	20.5	3.24	•77	10.9	6.0
Stoneville 213 ····	18.8	3.35	•96	14.2	4.0
Paymaster 303 ····	19.9	3.34	.73	12.6	5.0
Acala SJ-5	20.8	3.71	•57	10.1	5.5
Acala 1517-77	20.6	3.40	•81	11.7	5.0
Acala 1517-75	21.2	3.41	.81	9.2	6.0
Tamcot Sp-21	21.0	3.51	•90	7.7	7.0
rame or op 22 coord	2270	3 · 3 ·		, , ,	, , ,
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
Deltapine 61	91.1	106.3	1.003	6.0	9.1
Coker 310	93.8	108.4	1.068	2.3	10.0
McNair 220	88.6	104.3	1.032	1.3	9.1
Stoneville 213	96.9	109.8	1.032	2.3	10.0
Paymaster 303	99.7	112.8	1.019	4.3	10.1
Acala SJ-5	104.2	116.2	1.065	1.0	11.1
Acala 1517-77	114.9	124.0	1.022	2.0	11.7
	114.9	127.3	1.032	2.8	11.9
10010   5   /= / 5		17.70.)	T • U.J.Z	4.0	11.07
Acala 1517-75 Tamcot Sp-21	98.5	111.9	1.021	2.0	10.0

Table 106. Western test: Fiber data for El Paso, Tex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
·	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Acala 1517-75	1.20	0.58	206	7.2	4.00
Acala 1517-77	1.20	•58	210	6.7	4.25
Acala SJ-5 ·····	1.16	•56	208	7.0	4.35
Coker 310	1.18	•56	182	6.9	4.30
Deltapine 61	1.17	•53	190	8.6	4.45
McNair 220	1.12	•52	171	6.5	4.40
Paymaster 303	1.11	•50	174	7.0	4.25
Stoneville 213	1.13	•52	166	7.8	4.75
Tamcot Sp-21	1.10	• 52	176	7.7	4.00
	High Volume Instrument			Colorimeter	
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value
Acala 1517-75	1.24	86.5	24.0	68.5	9.7
Acala 1517-77	1.25	85.5	25.5	66.2	9.7
Acala SJ-5	1.18	84.5	24.5	66.8	10.3
Coker 310 ·····	1.24	83.5	22.5	62.2	11.7
Deltapine 61	1.22	85.0	22.0	71.8	10.5
McNair 220	1.15	84.0	21.0	65.2	10.8
Paymaster 303	1.12	82.5	20.0	69.5	12.0
Stoneville 213	1.17	83.5	21.0	64.2	11.2
Tamcot Sp-21	1.14	83.5	20.5	66.8	11.9

Table 107. Western test: Fiber data for Pecos, Tex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
	(	(Thenes)	(шіч/ сек)	(percent)	
Acala 1517-75	1.11	0.52	216	6.3	4.15
Acala 1517-77	1.12	•52	228	5.8	4.35
Acala SJ-5	1.09	•51	218	6.1	4.05
Coker 310	1.04	•46	181	5.9	4.50
Deltapine 61	1.07	• 48	198	8.2	4.70
McNair 220	1.02	.48	186	6.2	4.70
Paymaster 303	1.00	• 44	167	6.2	4 • 40
Stoneville 213	1.06	•48	185	6.7	4.75
Camcot Sp-21	• 98	•46	172	6.4	4.70
	Hig	h Volume Instru	Volume Instrument		rimeter
	UHM	Uniformity	Tenacity	$\overline{R_{d}}$	Hunter's
	(inches)	(percent)	(g/tex)	$\alpha$	b value
*					
cala 1517-75	1.12	84.0	25.5	69.2	9.0
cala 1517-77	1.14	84.0	26.0	66.8	9.0
cala SJ-5	1.11	83.5	24.0	67.2	9.6
Coker 310	1.04	82.0	21.5	63.2	8.3
eltapine 61	1.10	82.5	22.5	64.5	10.3
ScNair 220	1.05	82.5	21.0	63.0	9.1
	1 02	81.0	21.0	63.8	9.9
Paymaster 303	1.03	01 0			
Paymaster 303 Stoneville 213	1.04	82.5	21.0	57.0	9.6

## SAN JOAQUIN REGIONAL COTTON VARIETY TEST

Table 108. San Joaquin test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-2	1370 a	7.00 ab	38.5 a	12.6 a	158 a
Stoneville 213	1321 a	5.47 c	40.0 a	10.1 c	125 c
Acala SJ-5	1252 ab	7.24 a	39.3 a	11.6 b	169 a
Coker 310	1244 ab	5.76 c	40.8 a	9.9 c	140 b
Paymaster 303	1138 в	6.31 bc	38.2 a	11.1 b	117 c

Table 109. San Joaquin test: Fiber data by cotton variety

Variety	Digital F:	ibrograph	Stelo	meter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Acala SJ-2	1.12 a	0.52 a	202 a	6.1 b	4.50 a	
Stoneville 213	1.04 b	•48 ъ	167 Ь	6.6 a	4.58 a	
Acala SJ-5	1.11 a	•50 a	212 a	6.0 bc	4.32 a	
Coker 310	1.08 ab	.47 b	176 Ъ	5.9 bc	4.35 a	
Paymaster 303	1.00 c	.44 c	161 <sup>-</sup> b	5.6 c	4.52 a	
	High Volume Instrument			Colorimeter		
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value	
Acala SJ-2	1.12 a	82.8 a	25.5 a	70.0 a	11.6 a	
Stoneville 213	1.06 b	81.5 a	20.8 ъ	72.2 a	11.7 a	
Acala SJ-5	1.12 a	82.8 a	26.5 a	72.5 a	11.0 a	
Coker 310	1.10 ab	81.5 a	21.5 b	70.9 a	11.4 a	
Paymaster 303	1.00 c	81.0 a	20.5 Ъ	72.4 a	11.7 a	

Table 110. San Joaquin test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-2 ·····	19.2 c	3.12 c	0.75 ab	12.9 a	3.0 a
Stoneville 213	19.9 c	3.31 b	1.06 a	11.9 a	3.3 a
Acala SJ-5	22.0 a	3.44 a	.42 b	8.6 b	3.8 a
Coker 310	21.3 ab	3.32 b	•63 Ъ	9.8 Ъ	3.8 a
Paymaster 303	21.1 ъ	3.35 ab	•56 ъ	9.6 b	3.8 a
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
. 1 07 0	102.5	115 7	1 000 1		
Acala SJ-2	103.5 a	115.7 a	1.083 ь	1.8 a	11.2 a
Stoneville 213 ····	83.8 c	100.5 c	1.109 a	2.4 a	9.3 d
Acala SJ-5	97.2 Ъ	110.9 ь	1.097 ab	1.1 a	10.7 ь
Coker 310	86.5 c	102.7 c	1.102 ab	1.3 a	9.4 d
Paymaster 303 ····	95.6 в	109.7 ь	1.082 в	2.0 a	10.3 c

Table 111. San Joaquin test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Maricopa, Calif West Side Field	1436 a	6.54 a	38.5 a	11.0 a	142 a
Station, Calif	1093 Ъ	6.17 a	40.2 a	11.1 a	141 a

Table 112. San Joaquin test: Fiber data by test location

Location	Digital F	ibrograph	Stelo	meter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Maricopa, Calif West Side Field	1.07 a	0.47 a	182 a	6.2 a	4.19 b	
Station, Calif	1.07 a	.49 a	185 a	5.8 a	4.72 a	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
Maricopa, Calif West Side Field	1.09 a	81.4 a	23.0 a	73.2 a	11.6 a	
Station, Calif	1.07 a	82.4 a	22.9 a	70.0 ь	11.3 b	

Table 113. San Joaquin test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Maricopa, Calif West Side Field	20.2 b	3.44 a	0.60 a	1.009 в	3.7 a
Station, Calif	21.2 a	3.18 b	.76 a	1.104 a	3.3 a
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Maricopa, Calif West Side Field	95.6 a	109.7 a	1.074 b	2.1 a	10.2 a
Station, Calif	91.0 ь	106.1 в	1.115 a	1.4 a	10.2 a

Table 114. San Joaquin test: Yield, boll and yarn tenacity data for Maricopa, Calif.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Acala SJ-2	1580 a	7.55	37.8	13.0	156
Acala SJ-5	1464 ab	7.44	38.2	11.3	170
Stoneville 213	1443 ab	5.54	39.3	9.7	124
Coker 310	1367 Ъ	6.03	40.3	9.9	138
Paymaster 303	1329 Ъ	6.16	37.2	11.0	122

Table 115. San Joaquin test: Fiber data for Maricopa, Calif.

Variety	Digital F:	ibrograph	Stelo	meter	Micronaire	
	2.5% S.L.	50% S.L.	т1	Eı	reading	
	(inches)	(inches)	(mN/tex)	(percent)		
A1- CT 2	1 10	↑ F1	202		/ 15	
Acala SJ-2 ·····	1.12	0.51	202	6.4	4.15	
Acala SJ-5 ·····	1.10	•49	214	6.2	4.15	
Stoneville 213	1.06	• 48	159	6.8	4.35	
Coker 310	1.10	•46	179	6.2	4.05	
Paymaster 303	1.00	•43	158	5.6	4.25	
	High	h Volume Instru	ment	Color	Colorimeter	
	UHM	Uniformity	Tenacity	$\overline{R}_{d}$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
Acala SJ-2	1.12	81.5	26.0	72.2	11.7	
Acala SJ-5	1.14	82.0	26.5	74.5	11.7	
Stoneville 213	1.06	81.5	20.5			
				73.0	11.6	
Coker 310	1.12	81.0	22.0	74.0	11.8	
Paymaster 303	1.00	81.0	20.0	72.5	11.7	

Table 116. San Joaquin test: Seed data for Maricopa, Calif.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-2	18.7	3.24	0.57	12.4	3.0
Acala SJ-5	21.8	3.63	•36	8.4	4.0
Stoneville 213	19.6	3.44	•87	11.7	3.5
Coker 310	20.5	3.42	.70	9.3	4.0
Paymaster 303	20.6	3.47	•53	8.6	4.0
	Seed	Seed	Seed	Floaters	Acid-
	vo lume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
Acala SJ-2	104.4	116.4	1.066	2.8	11.1
Acala SJ-5	99.4	112.6	1.077	•5	10.7
Stoneville 213	86.9	103.0	1.082	3.0	9.4
Coker 310	90.3	105.6	1.075	1.5	9.5
Paymaster 303	97.2	110.9	1.069	2.5	10.1

Table 117. San Joaquin test: Yield, boll and yarn tenacity data for West Side Field Station, Calif.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 213	1199 a	5.41	40.8	10.5	126
Acala SJ-2	1161 ab	6.45	39.2	12.1	159
Coker 310	1121 ab	5.50	41.3	9.9	142
Acala SJ-5	1040 ab	7.05	40.4	11.8	168
Paymaster 303	947 Ъ	6.45	39.3	11.2	111

Table 118. San Joaquin test: Fiber data for West Side Field Station, Calif.

Variety	Digital F	ibrograph		Stelometer			
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading		
	(inches)	(inches)	(mN/tex)	(percent)			
Stoneville 213	1.03	0.48	175	6.4	4.80		
Acala SJ-2	1.12	•52	202	5.9	4.85		
Coker 310	1.07	.48	172	5.6	4.65		
Acala SJ-5	1.12	•52	210	5.8	4.50		
Paymaster 303	1.00	.44	165	5.6	4.80		
	High	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$R_d$	Hunter's		
	(inches)	(percent)	(g/tex)		b value		
Stoneville 213	1.06	81.5	21.0	71.5	11.7		
Acala SJ-2	1.13	84.0	25.0	67.8	11.4		
Coker 310	1.07	82.0	21.0	67.8	11.0		
Acala SJ-5	1.11	83.5	26.5	70.5	10.6		
Paymaster 303	1.00	81.0	21.0	72.2	11.7		
		<del> </del>					

Table 119. San Joaquin test: Seed data for West Side Field Station, Calif.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213 Acala SJ-2 Coker 310	20.3 19.8 22.0	3.19 2.99	1.25 .93	12.2 13.4	3.0 3.0 3.5
Acala SJ-5 Paymaster 303	22.2	3.22 .57 10.2 3.26 .48 8.9 3.24 .59 10.6	8.9	3.5 3.5	
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
Stoneville 213 Acala SJ-2 Coker 310 Acala SJ-5 Paymaster 303	80.8 102.6 82.8 95.0 94.1	98.1 115.0 99.7 109.3 108.6	1.136 1.100 1.129 1.117 1.094	1.8 .8 1.0 1.8 1.5	9.2 11.3 9.4 10.6 10.4

## HIGH-QUALITY REGIONAL COTTON VARIETY TEST

Table 120. High-quality test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299 La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293 Coker 80903 Delcot 311 Coker 310 WM 58-8-65 WM 53-3-31 Mo 63-277-1B Stoneville 1366	898 a 873 a 818 b 816 b 797 bc 793 bc 766 cd 764 cde 753 cde 745 de 734 def 728 def 727 def 718 ef 689 fg 670 g	4.80 f 5.53 abc 4.48 g 5.29 cde 5.04 e 5.13 e 5.12 e 5.12 e 4.74 f 5.49 abc 5.70 a 5.38 bcd 5.62 ab 5.46 abc 5.17 de 4.60 fg	39.0 ef 38.1 ghij 36.8 l 38.5 fgh 38.6 fg 41.1 b 39.3 de 39.7 d 40.4 c 38.3 ghi 37.6 j 37.8 ij 37.9 hij 38.6 fg 38.1 ghij 41.9 a	9.4 j 11.1 de 10.7 fg 10.6 fgh 10.8 efg 10.2 i 10.3 hi 10.4 ghi 11.0 de 11.2 cd 10.7 fg 11.4 bc 11.1 de 11.1 de 10.9 def	154 bc 152 bc 151 bc 139 de 152 bc 136 e 143 d 157 bc 153 bc 152 bc 155 bc 150 c 142 de 142 de 154 bc 154 bc
Mo. 73-1203  PD 5717  Acala SJ-5	668 g 656 g 538 h	5.49 abc 4.79 f 5.65 a	37.0 kl 39.3 de 37.5 jk	11.5 b 10.5 fghi 11.8 a	156 bc 158 b 172 a

Table 121. High-quality test: Fiber data by cotton variety

Variety	Digital Fi	brograph		meter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
Deltapine 7124 <b>-</b> 299	1.07 fgh	0.50 efg	206 bcd	6.0 de	5.10 ab	
a BD 434 RKR	1.10 abcdef	.50 efg	201 cde	6.1 d	4.69 efg	
Stoneville 1181	1.10 abcde	.50 defg	195 efg	5.0 ij	5.08 abc	
toneville 213	1.08 efgh	.50 g	182 h	6.2 d	4.99 bcd	
a BD 453 RKR	1.08 defg	•51 bcdefg	203 bcde	7.0 b	4.82 def	
Coker 76-110	1.07 gh	.50 fg	191 fgh	6.6 c	4.64 fg	
oker 76-114	1.08 efgh	.50 g	189 gh	5.3 hi	5.01 abcd	
D 5657	1.08 efgh	•51 bcdefg	200 cdef	5.4 gh	4.72 efg	
eltapine 7124-293	1.09 cdef	.50 fg	200 cdef	5.9 def	4.90 bcde	
Oker 80903	1.10 abcd	.51 bcdefg	196 defg	5.3 hi	4.62 fg	
elcot 311	1.06 h	.52 bc	208 bc	7.5 a	4.53 g	
oker 310	1.11 ab	.51 bcdef	197 defg	5.5 gh	4.70 efg	
M 58-8-65	1.10 abcd	.52 bcde	194 efg	7.2 ab	4.88 cde	
M 53-3-31	1.09 bcdef	.51 bcdef	189 gh	7.3 a	4.97 bcd	
60. 63-277-1B	1.10 abcd	.52 bcd	202 cde	6.2 d	4.57 g	
Stoneville 1366	1.11 abc	.52 bc	212 Ъ	4.9 j	5.21 a	
to. 73–1203	1.11 abc	.52 b	205 bcd	6.1 de	4.57 g	
D 5717	1.11 ab	.51 cdefg	206 bcd	5.6 fgh	4.87 cde	
cala SJ-5	1.12 a	.54 a	235 a	5.7 efg	4.56 g	
	High	Volume Instru	nent	Color	rimeter	
	UHM	Uniformity	Tenacity	$R_d$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
eltapine 7124-299	1 00 ch	83 3 had	26.9 ab	69.3 abc	10.1 bcde	
•	•				9.7 cdef	
a BD 434 RKR toneville 1181				65.4 d		
toneville 213 a BD 453 RKR	_					
oker 76-110						
		82.9 d		66.7 cd 66.9 cd		
D 5657						
eltapine 7124-293						
	1.12 abcuer	03.2 DCd				
•	1 12 abada	93 1 04	24 8 AAF	68 1 abad	10 2 had	
oker 80903						
oker 80903 elcot 311	1.05 i	83.8 ab	25.0 de	68.0 abcd	10.1 bcde	
oker 80903 elcot 311 oker 310	1.05 i 1.13 abcde	83.8 ab 83.0 cd	25.0 de 23.8 efg	68.0 abcd 68.7 abc	10.1 bcde 10.2 bc	
Coker 80903 elcot 311 Coker 310 M 58-8-65	1.05 i 1.13 abcde 1.13 abcd	83.8 ab 83.0 cd 83.7 abcd	25.0 de 23.8 efg 23.6 fg	68.0 abcd 68.7 abc 69.2 abc	10.1 bcde 10.2 bc 9.8 cdef	
Coker 80903	1.05 i 1.13 abcde 1.13 abcd 1.11 defgh	83.8 ab 83.0 cd 83.7 abcd 83.2 bcd	25.0 de 23.8 efg 23.6 fg 22.7 g	68.0 abcd 68.7 abc 69.2 abc 69.1 abc	10.1 bcde 10.2 bc 9.8 cdef 9.7 cdef	
Coker 80903	1.05 i 1.13 abcde 1.13 abcd 1.11 defgh 1.11 cdefgh	83.8 ab 83.0 cd 83.7 abcd 83.2 bcd 83.8 abc	25.0 de 23.8 efg 23.6 fg 22.7 g 23.7 fg	68.0 abcd 68.7 abc 69.2 abc 69.1 abc 66.7 cd	10.1 bcde 10.2 bc 9.8 cdef 9.7 cdef 10.0 bcde	
Coker 80903	1.05 i 1.13 abcde 1.13 abcd 1.11 defgh 1.11 cdefgh 1.15 a	83.8 ab 83.0 cd 83.7 abcd 83.2 bcd 83.8 abc 84.4 a	25.0 de 23.8 efg 23.6 fg 22.7 g 23.7 fg 27.6 a	68.0 abcd 68.7 abc 69.2 abc 69.1 abc 66.7 cd 66.8 cd	10.1 bcde 10.2 bc 9.8 cdef 9.7 cdef 10.0 bcde 9.6 def	
Coker 80903  Coker 310  M 58-8-65  M 53-3-31  Coker 310  M 53-3-31  Coker 310  M 53-3-31  Coker 310  M 53-3-31  Coker 310  M 53-3-31  Coker 310	1.05 i 1.13 abcde 1.13 abcd 1.11 defgh 1.11 cdefgh 1.15 a 1.14 ab	83.8 ab 83.0 cd 83.7 abcd 83.2 bcd 83.8 abc 84.4 a	25.0 de 23.8 efg 23.6 fg 22.7 g 23.7 fg 27.6 a 24.3 ef	68.0 abcd 68.7 abc 69.2 abc 69.1 abc 66.7 cd 66.8 cd 67.5 abcd	10.1 bcde 10.2 bc 9.8 cdef 9.7 cdef 10.0 bcde 9.6 def 10.4 ab	
Coker 80903 Delcot 311 Coker 310 WM 58-8-65 WM 53-3-31 Mo. 63-277-1B Stoneville 1366	1.05 i 1.13 abcde 1.13 abcd 1.11 defgh 1.11 cdefgh 1.15 a 1.14 ab 1.14 ab	83.8 ab 83.0 cd 83.7 abcd 83.2 bcd 83.8 abc 84.4 a 84.4 a 83.3 bcd	25.0 de 23.8 efg 23.6 fg 22.7 g 23.7 fg 27.6 a 24.3 ef 26.6 abc	68.0 abcd 68.7 abc 69.2 abc 69.1 abc 66.7 cd 66.8 cd 67.5 abcd 67.9 abcd	10.1 bcde 10.2 bc 9.8 cdef 9.7 cdef 10.0 bcde 9.6 def 10.4 ab 10.0 bcde	

Table 122. High-quality test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Doltanino 712/-200	18.9 abcd	3.54 ab	0.82 cde	10.9 ab	4.5 abcd
Deltapine 7124-299 La BD 434 RKR	19.0 abc	3.55 ab	.84 cd	11.1 ab	4.7 abc
Stoneville 1181	17.3 de	3.49 ab	.81 cde	12.5 ab	4.2 cde
Stoneville 213	16.7 e	3.46 b	.76 def	13.9 a	4.0 def
La BD 453 RKR	19.2 abc	3.50 ab	.88 bc	12.0 ab	4.7 abc
Coker 76-110	18.9 abcd	3.71 ab	.85 cd	11.9 ab	5.0 a
Coker 76-114	17.7 cde	3.48 ab	.81 cde	11.2 ab	4.5 abcd
PD 5657	18.2 bcde	3.50 ab	.80 cde	12.0 ab	4.8 ab
Deltapine 7124-293	17.0 e	3.60 ab	.68 f	10.8 ab	4.7 abc
Coker 80903	19.0 abc	3.60 ab	.77 def	12.8 ab	4.3 bcde
Delcot 311	19.0 abc	3.78 ab	.82 cde	9.8 b	4.8 ab
Coker 310	18.1 bcde	3.55 ab	.73 ef	10.3 b	4.3 bcde
VM 58-8-65	18.1 bcde	3.40 b	.70 f	12.6 ab	4.8 ab
IM 53-3-31	18.6 abcd	3.40 b	.81 cde	12.0 ab	4.8 ab
40. 63-277-1B	20.0 a	3.83 a	.96 b	10.9 ab	4.8 ab
Stoneville 1366	20.0 a 20.2 a	3.74 ab	1.08 a	11.8 ab	4.7 abc
Mo. 73-1203	19.7 ab		.97 b	12.1 ab	4.7 abc 4.3 bcde
		3.81 a	_		_
PD 5717	17.8 cde	3.59 ab	.75 def	13.5 a	3.5 f
Acala SJ-5	18.9 abcd	3.71 ab	.55 g	10.4 Ь	3.8 ef
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm²)	(g/cm <sup>3</sup> )		seed inde
001 taning 7124-299	84 O b	100 6 %	1.054 bodef	2 2 abc	8 <b>9</b> f
-	84.0 h	100.6 g	1.054 bcdef		8.9 i
a BD 434 RKR	99.8 bc	112.9 bc	1.025 ghij	1.3 c	10.2 cde
a BD 434 RKR Stoneville 1181	99.8 bc 100.3 bc	112.9 bc 113.2 bc	1.025 ghij .996 k	1.3 c 2.2 abc	10.2 cde 10.1 defg
La BD 434 RKR Stoneville 1181 Stoneville 213	99.8 bc 100.3 bc 95.5 cdef	112.9 bc 113.2 bc 109.6 cde	1.025 ghij .996 k 1.008 ijh	1.3 c 2.2 abc 1.9 bc	10.2 cde 10.1 defg 9.6 h
a BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR	99.8 bc 100.3 bc 95.5 cdef 92.6 efg	112.9 bc 113.2 bc 109.6 cde 107.4 def	1.025 ghij .996 k 1.008 ijh 1.047 cdefg	1.3 c 2.2 abc 1.9 bc 1.7 bc	10.2 cde 10.1 defg 9.6 h 9.8 fgh
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde
La BD 434 RKR Stoneville 1181 Stoneville 213 Stoneville 213 Coker 76-110 Coker 76-114	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h
La BD 434 RKR Stoneville 1181 Stoneville 213 Stoneville 213 Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293 Coker 80903	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 PD 5657 Deltapine 7124-293 Coker 80903 Delcot 311	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b
Deltapine 7124-299 La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293 Coker 80903 Delcot 311 Coker 310	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293 Coker 80903 Delcot 311 Coker 310	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc 102.9 b	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c 115.9 ab	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh 1.003 jk	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c 2.3 abc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd 10.3 bcde
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 Deltapine 7124-293 Coker 80903 Delcot 311 Coker 310 WM 58-8-65 WM 53-3-31	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc 102.9 b 98.3 bcd	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c 115.9 ab 111.7 c	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh 1.003 jk 1.015 hijk	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c 2.3 abc 1.3 c	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd 10.3 bcde 10.1 def
Stoneville 1181 Stoneville 213 Stoneville 214 Stoneville 214 Stoneville 215 Stoneville 215 Stoneville 215 Stoneville 2	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc 102.9 b 98.3 bcd 91.6 fg	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c 115.9 ab 111.7 c 106.6 ef	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh 1.003 jk 1.015 hijk 1.103 a	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c 2.3 abc 1.3 c 2.3 abc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd 10.3 bcde 10.1 def
Stoneville 1181 Stoneville 213 Stoneville 1366 Stoneville 1366	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc 102.9 b 98.3 bcd 91.6 fg 98.8 bc	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c 115.9 ab 111.7 c 106.6 ef 112.4 c	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh 1.003 jk 1.015 hijk 1.103 a 1.029 efghij	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c 2.3 abc 1.3 c 2.3 abc 3.1 ab	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd 10.3 bcde 10.1 def 10.1 def 10.3 bcde
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293 Coker 80903 Delcot 311 Coker 310 WM 58-8-65 WM 53-3-31 Mo 63-277-1B Stoneville 1366 Mo 73-1203	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc 102.9 b 98.3 bcd 91.6 fg 98.8 bc 97.2 cde	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c 115.9 ab 111.7 c 106.6 ef 112.4 c 110.8 cd	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh 1.003 jk 1.015 hijk 1.103 a 1.029 efghij 1.079 b	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c 2.3 abc 1.3 c 2.3 abc 3.1 ab 1.8 bc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd 10.3 bcde 10.1 def 10.1 def 10.3 bcde
La BD 434 RKR Stoneville 1181 Stoneville 213 La BD 453 RKR Coker 76-110 Coker 76-114 PD 5657 Deltapine 7124-293 Coker 80903 Delcot 311 Coker 310 WM 58-8-65 WM 53-3-31 Mo 63-277-18	99.8 bc 100.3 bc 95.5 cdef 92.6 efg 98.4 bcd 92.2 fg 91.7 fg 95.6 cdef 93.5 defg 99.1 bc 98.9 bc 102.9 b 98.3 bcd 91.6 fg 98.8 bc 97.2 cde	112.9 bc 113.2 bc 109.6 cde 107.4 def 111.8 c 107.0 ef 106.7 ef 109.6 cde 108.1 def 112.4 c 112.1 c 115.9 ab 111.7 c 106.6 ef 112.4 c 110.8 cd 105.7 f	1.025 ghij .996 k 1.008 ijh 1.047 cdefg 1.031 efghij 1.043 defg 1.026 fghij 1.014 hijk 1.061 bcd 1.072 bc 1.041 defgh 1.003 jk 1.015 hijk 1.103 a 1.029 efghij 1.079 b 1.055 bcde	1.3 c 2.2 abc 1.9 bc 1.7 bc 3.6 a 1.2 c 1.8 bc 2.6 abc 2.4 abc 1.3 c 1.1 c 2.3 abc 1.3 c 2.3 abc 3.1 ab 1.8 bc 2.1 abc	10.2 cde 10.1 defg 9.6 h 9.8 fgh 10.2 cde 9.6 h 9.5 h 9.7 gh 9.9 efgh 10.6 b 10.4 bcd 10.3 bcde 10.1 def 10.1 def 10.3 bcde

Table 123. High-quality test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
St. Joseph, La College Station,	1422 a	5.64 b	40.8 ъ	10.7 c	164 a
Tex	956 Ъ	4.55 e	37.7 d	10.7 c	158 bc
Portageville, Mo	824 c	5.06 cde	39.2 c	10.8 c	140 f
Tifton, Ga	772 cd	5.52 bc	38.1 d	11.4 в	150 d
Florence, S. C	718 d	6.18 a	41.8 a	10.4 d	138 f
Belle Mina, Ala	636 e	4.77 de	37.7 d	12.6 a	156 c
Jackson, Tenn	569 ef	5.16 bcd	34.3 e	10.8 c	159 Ъ
Stoneville, Miss	544 ef	4.72 de	39.2 c	10.0 e	151 d
Rocky Mt., N. C	508 f	5.11 cd	39.8 c	9.8 e	147 e

Table 124. High-quality test: Fiber data by test location

Location	Digital F	ibrograph	Stelo	meter	Micronaire	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading	
St. Joseph, La	1.12 c	0.52 c	198 ъ	6.0 b	4.59 e	
College Station, Tex	1.14 b	•57 a	213 a	6.0 ъ	4.48 f	
	1.11 c	.49 d	198 bc	6.0 b	4.79 d	
Portageville, Mo	1.09 d	•52 c	197 bc	5.6 c	5.16 b	
Tifton, Ga	1.09 d	.47 f	196 bc	6.5 a	5.56 a	
Florence, S. C	1.15 a	•47 1 •53 b	207 a	6.4 a	4.83 d	
Belle Mina, Ala	1.15 ab	•54 b	207 a 212 a	5.9 b	4.33 g	
Jackson, Tenn		• 48 e	196 bc	5.6 c	4.99 c	
Stoneville, Miss	1.06 e 1.02 f	.40 e	190 BC	6.5 a	4.55 ef	
Rocky Mt., N. C	1.02 1	• 47 1		0.5 a	4.33 61	
	High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$R_d$	Hunter's	
	(inches)	(percent)	(g/tex)		b value	
St. Joseph, La	1.15 bc	84.3 bc	24.4 de	70.3 ab	9.9 c	
College Station, Tex	1.14 c	84.9 a	25.3 c	62.9 d	11.1 ь	
Portageville, Mo.	1.14 c	82.7 d	25.9 Ъ	66.0 c	9.6 c	
Tifton, Ga	1.11 d	84.6 ab	24.8 cd	68.3 bc	9.0 de	
Florence, S. C	1.02 e	82.2 d	24.4 de	67.2 c	9.4 cd	
Belle Mina, Ala	1.18 a	84.4 bc	26.2 ab	72.2 a	10.9 b	
Jackson, Tenn	1.17 ab	83.9 c	26.7 a	70.6 ab	11.9 a	
Stoneville, Miss	1.08 d	81.7 e	23.1 f	63.4 d	8.5 e	
Rocky Mt., N. C	1.00 d	82.8 d	24.0 e	71.2 a	9.8 c	
nocky liet, lit of the	1401	0210 4	2.00			

Table 125. High-quality test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
St. Joseph, La Florence, S. C Belle Mina, Ala	19.7 a	3.37 b	0.87 a	11.0 b	4.6 b
	17.8 b	3.87 a	.85 a	10.7 b	4.9 a
	18.2 b	3.53 b	.70 b	13.5 a	3.9 c
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
St. Joseph, La Florence, S. C Belle Mina, Ala	95.8 b	110.0 b	1.021 c	2.5 a	9.8 b
	88.4 c	104.1 c	1.058 a	1.5 b	9.4 c
	104.6 a	116.5 a	1.037 b	1.9 b	10.9 a

Table 126. High-quality test: Combined yield, boll and yarn tenacity data for College Station, Tex., St. Joseph, La., Stoneville, Miss., Jackson, Tenn., and Portageville, Mo., by cotton variety

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
*		<del></del>			
Deltapine 7124-299	1038 a	4.60 fgh	39.0 c	9.1 h	157 bc
La BD 434 RKR	1008 a	5.46 a	37.5 efg	11.0 bcd	152 bcd
Stoneville 213	930 Ъ	5.29 abc	38.2 cde	10.4 efg	144 de
La BD 453 RKR	924 Ъ	4.90 def	38.0 def	10.1 efg	154 bc
Stoneville 1181	921 b	4.27 i	36.3 hi	10.3 efg	153 bcd
Coker 76-110	879 bc	4.96 de	40.5 b	10.5 def	139 e
Coker 76-114	877 bc	4.91 def	38.7 cd	10.0 fg	149 cd
Deltapine 7124-293	835 cd	4.49 ghi	40.4 Ъ	9.8 g	155 bc
WM 58-8-65	831 cd	5.47 a	37.5 efg	11.2 b	144 de
Coker 80903	828 cd	5.33 abc	37.3 fg	11.0 bcd	159 Ъ
Delcot 311	818 cde	5.49 a	36.8 ghi	11.2 ab	158 bc
Coker 310	812 cde	5.06 cd	37.3 fg	10.5 def	152 bcd
PD 5657	804 cdef	5.08 bcd	39.1 c	10.2 efg	156 bc
WM 53-3-31	798 def	5.31 abc	38.3 cde	10.9 bcd	144 de
Mo. 63-277-1B	795 def	5.02 cd	37.7 ef	11.1 bc	158 bc
Mo. 73-1203	752 efg	5.33 abc	36.1 i	11.5 ab	158 bc
Stoneville 1366	734 fg	4.38 hi	41.6 a	10.6 cde	162 b
PD 5717	721 g	4.70 efg	39.0 c	10.2 efg	161 b
Acala SJ-5	597 h	5.41 ab	37.1 fgh	11.7 a	176 a

Table 127. High-quality test: Combined fiber data for College Station, Tex., St. Joseph, La., Stoneville, Miss., Jackson, Tenn., and Portageville, Mo., by cotton variety

Variety	Digital Fi	Digital Fibrograph		Stelometer	
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Deltapine 7124-299	1.09 e	0.51 defg	206 bcd	5.8 defg	4.99 ab
La BD 434 RKR	1.12 abcde	.51 cdefg	202 bcd	6.1 cde	4.57 cdef
Stoneville 213	1.10 abcde	.50 fg	185 e	5.9 cdef	4.81 abcd
La BD 453 RKR	1.10 abcde	.51 cdefg	204 bcd	6.8 Ъ	4.60 cdefg
Stoneville 1181	1.12 abcde	.51 efg	196 <sup>-</sup> de	4.8 jk	4.89 abc
Coker 76-110	1.10 de	.51 cdefg	195 de	6.3 c	4.50 defgh
Coker 76-114	1.10 bcde	.50 fg	193 de	5.1 ijk	4.78 abcde
Deltapine 7124-293	1.11 abcde	.50 fg	199 cd	5.7 efgh	4.80 abcd
WM 58-8-65	1.13 abcd	•53 abcde	196 de	6.8 Ъ	4.73 bcdef
Coker 80903	1.13 abc	.52 bcdef	202 bcd	5.2 hij	4.36 gh
Delcot 311	1.09 e	.53 abc	214 Ъ	7.3 a	4.24 g
Coker 310	1.13 ab	•52 abcde	198 cd	5.5 fghi	4.58 cdefg
PD 5657	1.10 cde	.52 bcdefg	202 bcd	5.5 fghi	4.59 cdefg
WM 53-3-31	1.12 abcde	•53 abcd	194 de	7.0 ab	4.78 abcde
Mo. 63-277-1B	1.12 abcde	.53 abc	202 bcd	6.2 cd	4.46 efg
Mo. 73-1203	1.13 ab	.54 ab	209 bc	6.1 cde	4.29 gh
Stoneville 1366	1.13 abc	•53 abc	213 b	4.8 k	5.06 a
PD 5717	1.12 abcd	.52 bcdefg	210 bc	5.4 ghi	4.68 bcdef
Acala SJ-5	1.14 a	•54 a	239 a	5.7 efgh	4.43 fgh
	High	Volume Instru	nent	Colo	rimeter
	High UHM	Volume Instru			rimeter Hunter's
		Volume Instrum Uniformity (percent)	Tenacity (g/tex)	$\frac{\text{Colo}}{R_d}$	
	UHM	Uniformity	Tenacity		Hunter's
Deltapine 7124 <b>-</b> 299	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's
-	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)  26.9 ab	67.4 a	Hunter's b value
La BD 434 RKR	UHM (inches)	Uniformity (percent)  83.5 bcdef	Tenacity (g/tex)  26.9 ab 24.6 cdefg	67.4 a	Hunter's b value  10.3 abcd 9.8 cd
La BD 434 RKR Stoneville 213	UHM (inches)  1.11 cd 1.16 ab	Uniformity (percent)  83.5 bcdef 83.2 def	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh	67.4 a 67.6 a 66.7 a	Hunter's b value  10.3 abcd 9.8 cd
La BD 434 RKR Stoneville 213 La BD 453 RKR	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg	67.4 a 67.6 a 66.7 a 66.5 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef	Tenacity (g/tex) 26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef	Tenacity (g/tex) 26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef	Tenacity (g/tex) 26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a
La BD 434 RKR  Stoneville 213  La BD 453 RKR  Stoneville 1181  Coker 76-110  Coker 76-114  Deltapine 7124-293	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.11 cd 1.11 cd	Uniformity (percent) 83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.11 cd 1.16 ab	Uniformity (percent) 83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def	Tenacity (g/tex) 26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.11 cd 1.16 ab	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef	Tenacity (g/tex) 26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903 Delcot 311	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef	Tenacity (g/tex) 26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 67.1 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903 Delcot 311 Coker 310	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab 1.16 ab 1.18 abc	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef 83.9 abcde	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd 23.9 efgh	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 67.1 a 66.9 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd 10.3 abcd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903 Delcot 311 Coker 310 PD 5657	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab 1.08 d 1.15 abc 1.11 cd	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef 83.9 abcde 83.3 cdef	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd 23.9 efgh 25.8 bc	67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 66.9 a 67.1 a 66.9 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd 10.3 abcd 10.2 bcd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903 Delcot 311 Coker 310 PD 5657 WM 53-3-31	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab 1.16 ab 1.17 abc 1.18 abc 1.18 abc 1.19 abc 1.11 cd 1.11 cd 1.11 cd	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef 83.9 abcde 83.3 cdef 83.1 def 83.2 def	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd 23.9 efgh 25.8 bc 22.8 h	Rd  67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 66.9 a 67.1 a 66.9 a 65.7 a 68.4 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd 10.3 abcd 10.2 bcd 10.1 bcd 9.9 cd
Stoneville 213  La BD 453 RKR  Stoneville 1181  Coker 76-110  Coker 76-114  Deltapine 7124-293  WM 58-8-65  Coker 80903  Delcot 311  Coker 310  PD 5657  WM 53-3-31  Mo. 63-277-1B	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab 1.16 ab 1.17 abc 1.18 abc 1.19 abc 1.11 abc 1.11 abc 1.11 abc 1.11 abc 1.11 abc	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef 83.9 abcde 83.3 cdef 83.1 def 83.1 def	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd 23.9 efgh 25.8 bc 22.8 h 24.1 defgh	Rd  67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 66.9 a 67.1 a 66.9 a 65.7 a 68.4 a 64.6 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd 10.3 abcd 10.2 bcd 10.1 bcd 9.9 cd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903 Delcot 311 Coker 310 PD 5657 WM 53-3-31 Mo. 63-277-1B Mo. 73-1203	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab 1.17 abc 1.18 abc 1.18 abc 1.19 abc 1.11 cd 1.11 cd 1.11 cd 1.11 cd 1.11 abc 1.11 abc 1.11 abc 1.11 abc 1.11 abc 1.11 abc	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef 83.9 abcde 83.3 cdef 83.1 def 83.2 def	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd 23.9 efgh 25.8 bc 22.8 h 24.1 defgh 24.2 cdefgh	Rd  67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 66.9 a 67.1 a 66.9 a 65.7 a 68.4 a 64.6 a 66.7 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd 10.3 abcd 10.2 bcd 10.1 bcd 9.9 cd 10.3 abcd
La BD 434 RKR Stoneville 213 La BD 453 RKR Stoneville 1181 Coker 76-110 Coker 76-114 Deltapine 7124-293 WM 58-8-65 Coker 80903 Delcot 311 Coker 310	UHM (inches)  1.11 cd 1.16 ab 1.14 abc 1.12 bc 1.15 abc 1.11 cd 1.11 cd 1.14 abc 1.16 ab 1.16 ab 1.16 ab 1.17 abc 1.17 a	Uniformity (percent)  83.5 bcdef 83.2 def 83.1 def 83.4 cdef 82.9 ef 83.5 bcdef 82.7 f 83.1 def 83.7 abcdef 82.8 ef 83.9 abcde 83.3 cdef 83.1 def 83.1 def 83.4 cdef 83.5 bcdef 83.7 abcdef 83.8 abcde 83.9 abcde 83.9 abcde	Tenacity (g/tex)  26.9 ab 24.6 cdefg 23.4 gh 24.5 cdefg 25.4 bcde 23.7 fgh 24.2 cdefgh 26.7 ab 23.8 fgh 25.3 bcdef 25.6 bcd 23.9 efgh 25.8 bc 22.8 h 24.1 defgh 24.2 cdefgh 24.2 cdefgh	Rd  67.4 a 67.6 a 66.7 a 66.5 a 65.0 a 67.0 a 65.4 a 69.1 a 66.9 a 67.1 a 66.9 a 65.7 a 68.4 a 64.6 a 66.7 a 66.6 a	Hunter's b value  10.3 abcd 9.8 cd 10.4 abcd 10.0 bcd 9.8 cd 11.0 a 10.8 ab 9.6 d 9.8 cd 10.5 abcd 10.3 abcd 10.1 bcd 9.9 cd 10.3 abcd 10.3 abcd 10.1 bcd 9.9 cd 10.3 abcd

Table 128. High-quality test: Combined yield, boll and yarn tenacity data for Tifton, Ga., Florence, S.C., Rocky Mount, N.C., and Belle Mina, Ala., by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	744 a	5.06 cde	39.0 defgh		151 bcd
La BD 434 RKR	723 a	5.63 ab	38.9 efghi	11.3 bcd	152 bcd
PD 5657	720 a	5.16 cd	40.6 Ъ	10.4 ef	158 ъ
Stoneville 1181	704 ab	4.75 e	37.5 j	11.3 bcd	150 bcd
Coker 76-110	698 abc	5.34 bc	41.8 a	11.2 bcd	133 gh
Stoneville 213	690 abcd	5.30 bc	38.9 efghi	10.8 de	132 h
Deltapine 7124-293	662 bcde	5.06 cde	40.4 bc	11.1 bcde	151 bcd
La BD 453 RKR	657 bcde	5.22 cd	39.3 defg	10.8 de	150 bcd
Coker 80903	654 bcdef	5.68 ab	39.6 cdef	11.1 bcde	144 def
Coker 76-114	644 cdef	5.37 bc	39.9 bcd	10.6 de	137 fgh
Delcot 311	642 cdef	5.95 a	38.6 fghi	11.2 bcd	152 bcd
Coker 310	635 defg	5.77 a	38.6 ghi	10.9 cde	147 cde
WM 53-3-31	630 efg	5.65 ab	39.1 defg	11.4 bc	139 fgh
WM 58-8-65	611 efgh	5.80 a	38.5 ghi	11.6 ab	140 efg
Stoneville 1366	599 fgh	4.88 de	42.2 a	11.2 bcd	145 def
PD 5717	583 gh	4.90 de	39.7 bcde	10.8 de	154 bc
Mo. 73-1203	574 h	5.68 ab	38.1 hij	11.5 b	154 bc
Mo. 63-277-1B	572 h	5.36 bc	38.6 ghi	11.1 bcde	151 bcd
Acala SJ-5	473 i	5.96 a	38.0 ij	12.0 a	168 a

Table 129. High-quality test: Combined fiber data for Tifton, Ga., Florence, S.C., Rocky Mount, N.C., and Belle Mina, Ala., by cotton variety

Variety	Digital Fi	brograph	Stelom	eter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Deltapine 7124-299	1.05 defgh	0.49 bc	206 bc	6.3 de	5.24 abc
La BD 434 RKR	1.07 bcdef	.49 bc	199 bcdef	6.2 de	4.85 efg
PD 5657	1.05 defg	.49 bc	196 bcdef	5.3 gh	4.88 efg
Stoneville 1181	1.08 abcde	.50 bc	193 cdefg	5.2 h	5.31 ab
Coker 76-110	1.04 fg	.48 c	186 defg	7.0 bc	4.81 efg
Stoneville 213	1.05 efg	.49 bc	178 g	6.6 cd	5.22 abc
Deltapine 7124-293	1.07 abcde	.50 bc	201 bcde	6.1 def	5.02 bcdef
La BD 453 RKR	1.06 cdef	.51 b	203 bcd	7.2 b	5.10 bcde
Coker 80903	1.07 abcde	.50 bc	189 defg	5.4 gh	4.95 cdefg
Coker 76-114	1.05 defg	.49 bc	184 efg	5.5 gh	5.30 ab
Delcot 311	1.03 g	.50 Ъ	200 bcdef	7.8 a	4.89 efg
Coker 310	1.09 abc	.50 bc	195 bcdefg	5.6 fgh	4.85 efg
WM 53-3-31	1.06 cdef	.50 bc	184 fg	7.7 a	5.20 abcd
WM 58-8-65	1.08 abcde	.50 bc	192 defg	7.8 a	5.06 bcde
Stoneville 1366	1.08 abcd	.50 Ъ	212 b	5.1 h	5.40 a
PD 5717	1.10 a	.49 bc	202 bcd	5.8 efg	5.10 bcde
Mo. 73-1203	1.08 abcd	.50 bc	200 bcdef	6.1 def	4.91 defg
Mo. 63-277-1B	1.08 abcd	.50 bc	202 bcd	6.3 de	4.71 g
Acala SJ-5	1.09 ab	•53 a	230 a	5.8 efg	4.72 fg
	High	Volume Instru	ment	Color	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
				~	
	(inches)	(percent)	(g/tex)		b value
Deltanine 7124-299					<i>b</i> value
-	1.07 bcd	83.1 cdef	26.9 ab	71.8 ab	b value  9.8 bcd
La BD 434 RKR	1.07 bcd 1.07 cd	83.1 cdef 83.2 bcdef	26.9 ab 24.0 ef	71.8 ab 73.4 a	9.8 bcd 9.6 bcd
La BD 434 RKR PD 5657	1.07 bcd 1.07 cd 1.05 de	83.1 cdef 83.2 bcdef 83.0 def	26.9 ab 24.0 ef 25.6 bcde	71.8 ab 73.4 a 69.8 abcd	9.8 bcd 9.6 bcd 9.4 cd
La BD 434 RKR PD 5657 Stoneville 1181	1.07 bcd 1.07 cd 1.05 de 1.12 a	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd	71.8 ab 73.4 a 69.8 abcd 65.9 d	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc 9.9 abcd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.09 abc	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.09 bcd	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.2 bcdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 68.9 abcd 69.1 abcd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311 Coker 310	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.09 abc 1.09 abc 1.09 abc 1.09 abc	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.8 abcde 82.6 f	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef 23.8 ef	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 69.1 abcd 71.0 abc	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc 9.9 abcd 10.0 abc
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311 Coker 310 WM 53-3-31	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.8 abcde 82.6 f 83.1 cdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef 23.8 ef 22.5 f	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 68.9 abcd 69.1 abcd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd 10.0 abc
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311 Coker 310 WM 53-3-31 WM 58-8-65	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.07 bcd 1.02 e 1.10 abc 1.07 cd 1.10 ab	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.8 abcde 82.6 f 83.1 cdef 83.8 abcde	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef 23.8 ef	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 68.9 abcd 71.0 abc 69.9 abcd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311 Coker 310 WM 53-3-31 WM 58-8-65 Stoneville 1366	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.07 bcd 1.02 e 1.10 abc 1.07 cd 1.10 ab	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.8 abcde 82.6 f 83.1 cdef 83.8 abcde 84.1 abc	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef 23.8 ef 22.5 f 23.4 f	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 69.1 abcd 71.0 abc 69.9 abcd 72.1 ab	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd 10.3 ab 9.5 cd 9.7 bcd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311 Coker 310 WM 53-3-31 WM 58-8-65 Stoneville 1366 PD 5717	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.07 bcd 1.02 e 1.10 abc 1.07 cd 1.10 ab 1.12 a 1.11 a	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.8 abcde 82.6 f 83.1 cdef 83.8 abcde 84.1 abc 83.2 bcdef	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef 23.8 ef 22.5 f 23.4 f 27.5 a 27.1 ab	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 69.1 abcd 71.0 abc 69.9 abcd 72.1 ab 67.0 cd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 9.2 d 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd 10.3 ab 9.5 cd 9.7 bcd 9.5 cd
La BD 434 RKR PD 5657 Stoneville 1181 Coker 76-110 Stoneville 213 Deltapine 7124-293 La BD 453 RKR Coker 80903 Coker 76-114 Delcot 311 Coker 310 WM 53-3-31 WM 58-8-65 Stoneville 1366 PD 5717 Mo 73-1203	1.07 bcd 1.07 cd 1.05 de 1.12 a 1.07 bcd 1.07 bcd 1.09 abc 1.07 bcd 1.09 abc 1.07 bcd 1.02 e 1.10 abc 1.07 cd 1.10 ab	83.1 cdef 83.2 bcdef 83.0 def 84.0 abcd 83.4 bcdef 82.9 ef 83.4 bcdef 84.1 abc 83.4 bcdef 83.2 bcdef 83.8 abcde 82.6 f 83.1 cdef 83.8 abcde 84.1 abc	26.9 ab 24.0 ef 25.6 bcde 25.9 abcd 23.5 f 23.9 ef 26.0 abc 25.5 bcde 24.1 def 23.8 ef 24.2 cdef 23.8 ef 24.2 cdef 23.8 ef 24.2 cdef 23.4 f 27.5 a	71.8 ab 73.4 a 69.8 abcd 65.9 d 66.2 d 69.4 abcd 72.3 ab 71.5 abc 69.4 abcd 68.9 abcd 69.1 abcd 71.0 abc 69.9 abcd 72.1 ab 67.0 cd 68.9 abcd	9.8 bcd 9.6 bcd 9.4 cd 9.4 cd 10.6 a 9.9 abcd 10.0 abc 9.9 abcd 10.0 abc 9.9 abcd 10.3 ab 9.5 cd 9.7 bcd 9.7 bcd 9.7 bcd

Table 130. High-quality test: Yield, boll and yarn tenacity data for St. Joseph, La.

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 453 RKR	1665 a	5.71	40.8	10.3	166
Coker 76-110	1605 ab	5.56	42.5	10.6	150
La BD 434 RKR	1574 ab	5.97	40.1	11.4	160
Deltapine 7124-299	1572 ab	5.30	41.2	9.6	170
Stoneville 213	1539 abc	5.56	41.1	10.6	147
Coker 76-114	1530 abc	5.82	41.1	10.5	164
Coker 80903	1490 abcd	5.89	42.6	11.0	168
Coker 310	1461 abcd	6.01	39.3	10.9	169
PD 5657	1443 abcd	5.44	41.7	10.•0	174
WM 58-8-65	1413 bcd	5.88	40.3	11.4	152
Delcot 311	1403 bcd	5.95	38.8	11.5	170
Stoneville 1181	1394 bcd	5.02	38.8	10.9	160
Stoneville 1366	1374 bcd	5.15	42.3	10.7	161
Mo. 63-277-1B	1373 bcd	5.69	40.0	11.2	172
PD 5717	1373 bcd	5.39	41.6	10.3	174
WM 53-3-31	1320 cd	5.79	40.6	10.5	158
Deltapine 7124-293	1318 cd	5.14	44.7	10.1	156
Mo. 73-1203	1253 d	5.94	38.3	11.2	177
Acala SJ-5	912 e	5.93	39.3	11.8	168

Table 131. High-quality test: Fiber data for St. Joseph, La.

Location	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
La BD 453 RKR	1.10	0.52	205	6.8	4.65
Coker 76-110	1.12	•53	182	6.2	4.35
a BD 434 RKR	1.14	•53	198	6.3	4.50
eltapine 7124-299	1.11	•53	210	5.8	4.70
toneville 213	1.08	•48	177	6.1	5.10
oker 76-114	1.11	•52	182	5.0	4.95
oker 80903	1.14	• 52	186	5.2	4.15
oker 310	1.18	•55	206	5.4	4.50
5657	1.11	•54	206	5.9	4.30
4 58-8-65	1.12	•52	176	7.0	4.60
elcot 311	1.08	•52	208	7.4	4.25
coneville 1181	1.12	•52	191	4.8	4.95
coneville 1366	1.12	•51	198	4.8	4.95
63-277-1B · · · · ·	1.15	•55	210	6.2	4.45
5717	1.12	•52	206	5.6	4.60
1 53-3-31	1.12	•52	184	7.4	
					4.40
1tapine 7124-293	1.08	•48	182	5.6	5.05
. 73–1203	1.16	•55	201	6.0	4.35
ala SJ-5	1.10	• 54	246	5.6	4.50
		h Volume Instru			rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		<i>b</i> value
a BD 453 RKR	1.14	85.5	22.5	69.5	9.2
oker 76-110	1.15	84.0	23.5	67.2	11.5
BD 434 RKR	1.18	84.0	24.0	71.8	9.6
ltapine 7124-299	1.11	84.0	26.0	71.5	10.5
oneville 213	1.12	84.5	22.0	69.5	10.9
ker 76-114	1.12	83.5	23.0	72.8	11.5
ker 80903	1.17	83.5	25.0	73.2	10.5
ker 310	1.22	84.5	24.0	70.5	10.3
			26.5		10.3
5657	1.11	84.0		71.2	
	1.15	84.5	23.5	69.0	9.2 9.7
	1 10	0/. =	7 5 (1)		W /
lcot 311	1.10	84.5	25.0	67.2	
clcot 311	1.14	83.5	25.0	64.5	8.1
elcot 311 coneville 1181 coneville 1366	1.14 1.16	83.5 84.0	25.0 28.5	64.5 72.2	8.1 9.7
coneville 1181 coneville 1366 coneville 1366	1.14 1.16 1.18	83.5 84.0 85.5	25.0 28.5 24.0	64.5 72.2 63.5	8.1 9.7 9.6
coneville 1181 coneville 1366 coneville 5717	1.14 1.16 1.18 1.20	83.5 84.0 85.5 84.0	25.0 28.5 24.0 24.0	64.5 72.2 63.5 72.2	8.1 9.7 9.6 9.4
coneville 1181 coneville 1366 coneville 5717 d 53-3-31	1.14 1.16 1.18 1.20 1.14	83.5 84.0 85.5 84.0 84.0	25.0 28.5 24.0 24.0 21.5	64.5 72.2 63.5 72.2 71.8	8.1 9.7 9.6 9.4 8.7
elcot 311	1.14 1.16 1.18 1.20 1.14 1.12	83.5 84.0 85.5 84.0 84.0	25.0 28.5 24.0 24.0 21.5 24.5	64.5 72.2 63.5 72.2 71.8 74.0	8.1 9.7 9.6 9.4 8.7 9.7
1 58-8-65	1.14 1.16 1.18 1.20 1.14	83.5 84.0 85.5 84.0 84.0	25.0 28.5 24.0 24.0 21.5	64.5 72.2 63.5 72.2 71.8	8.1 9.7 9.6 9.4 8.7

Table 132. High-quality test: Seed data for St. Joseph, La.

0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
20.4	3.14	1.02	11.3	4.5
		•96	8.3	5.0
				4.5
				5.0
				4.5
		•87	9.3	5.0
				4.0
				5.0
				5.0
				5.0
				5.0
				4.5
				5.0
				4.5
				3.5
				5.0
				5.0
				4.0
				4.0
2002				
Seed	Seed	Seed	Floaters	Acid-
	surface	density	(percent)	delinted-
(mm <sup>3</sup> )	area (mm²)	(g/cm <sup>3</sup> )		seed index
92.3	107.2	1.015	1.5	9.6
92.3 99.1	107.2	1.015	1.5	9.6
99.1	112.4	1.012	4.3	9.9
99.1 102.5	112.4 114.9	1.012 1.002	4.3 1.8	9.9
99.1 102.5 85.1	112.4 114.9 101.5	1.012 1.002 1.027	4.3 1.8 2.5	9.9 10.3 8.7
99.1 102.5 85.1 99.2	112.4 114.9 101.5 112.4	1.012 1.002 1.027 .993	4.3 1.8 2.5 3.5	9.9 10.3 8.7 9.3
99.1 102.5 85.1 99.2 96.1	112.4 114.9 101.5 112.4 110.1	1.012 1.002 1.027 .993 1.020	4.3 1.8 2.5 3.5 2.3	9.9 10.3 8.7 9.3 9.7
99.1 102.5 85.1 99.2 96.1 95.4	112.4 114.9 101.5 112.4 110.1 109.5	1.012 1.002 1.027 .993 1.020 1.047	4.3 1.8 2.5 3.5 2.3 1.0	9.9 10.3 8.7 9.3 9.7 10.0
99.1 102.5 85.1 99.2 96.1 95.4 96.6	112.4 114.9 101.5 112.4 110.1 109.5 110.5	1.012 1.002 1.027 .993 1.020 1.047	4.3 1.8 2.5 3.5 2.3 1.0	9.9 10.3 8.7 9.3 9.7 10.0 9.9
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0	112.4 114.9 101.5 112.4 110.1 109.5 110.5	1.012 1.002 1.027 .993 1.020 1.047 1.027	4.3 1.8 2.5 3.5 2.3 1.0 1.5	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.2 9.9
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6 97.8	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0 111.4	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001 1.047 .985	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8 3.8	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9 10.7 9.9
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6 97.8 99.2	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0 111.4 113.6	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001 1.047 .985 1.005	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8 3.8 4.0	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9 10.7 9.9
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6 97.8 99.2 91.3	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0 111.4 113.6 106.4	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001 1.047 .985 1.005 1.106	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8 3.8 4.0 1.8	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9 10.7 9.9
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6 97.8 99.2 91.3 88.3	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0 111.4 113.6 106.4 104.0	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001 1.047 .985 1.005 1.106 1.031	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8 3.8 4.0 1.8	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9 10.7 9.9 10.0 10.0 9.1
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6 97.8 99.2 91.3 88.3 91.3	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0 111.4 113.6 106.4 104.0 106.4	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001 1.047 .985 1.005 1.106 1.031 1.006	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8 3.8 4.0 1.8 1.8 2.3	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9 10.7 9.9 10.0 10.0 9.1 9.5
99.1 102.5 85.1 99.2 96.1 95.4 96.6 91.0 98.6 102.6 97.8 99.2 91.3 88.3	112.4 114.9 101.5 112.4 110.1 109.5 110.5 106.2 114.4 115.0 111.4 113.6 106.4 104.0	1.012 1.002 1.027 .993 1.020 1.047 1.027 1.010 1.001 1.047 .985 1.005 1.106 1.031	4.3 1.8 2.5 3.5 2.3 1.0 1.5 1.0 3.5 2.8 3.8 4.0 1.8	9.9 10.3 8.7 9.3 9.7 10.0 9.9 9.2 9.9 10.7 9.9 10.0 10.0 9.1
	20.4 20.9 20.3 19.9 18.8 19.0 20.4 19.2 19.2 19.3 20.5 18.5 21.2 21.6 18.3 19.5 17.3 20.6 20.2	20.4 20.9 3.34 20.3 3.35 19.9 3.26 18.8 3.27 19.0 3.31 20.4 3.37 19.2 3.33 19.2 3.29 19.3 20.5 3.58 18.5 3.34 21.2 3.50 21.6 3.67 18.3 3.40 19.5 3.23 17.3 3.39 20.6 Seed volume Seed volume Seed surface	20.4 3.14 1.02 20.9 3.34 .96 20.3 3.35 .97 19.9 3.26 .78 18.8 3.27 .90 19.0 3.31 .87 20.4 3.37 .81 19.2 3.33 .80 19.2 3.29 .87 19.3 3.23 .77 20.5 3.58 .89 18.5 3.34 .98 21.2 3.50 1.20 21.6 3.67 1.01 18.3 3.40 .80 19.5 3.23 .85 17.3 3.39 .56 20.6 3.53 1.08 20.2 3.60 Seed Seed volume surface density	(percent)  20.4

Table 133. High-quality test: Yield, boll and yarn tenacity data for College Station, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 434 RKR	1282 a	4.81	38.4	10.3	152
Deltapine 7124-299	1254 ab	4.14	38.6	8.5	158
Stoneville 213	1095 abc	5.23	37.6	10.3	142
Stoneville 1181	1065 abcd	4.02	36.3	10.2	156
La BD 453 RKR	1048 abcd	4.51	39.0	9.5	156
Coker 76-114	1030 bcd	4.50	38.1	9.8	154
Coker 310	1019 bcde	4.96	36.6	10.7	150
Delcot 311	982 cde	4.75	36.8	11.1	160
Coker 76-110	951 cde	4.44	39.7	11.0	143
Mo. 63-277-1B	942 cde	4.27	38.1	12.0	158
Mo. 73-1203	930 cde	4.98	36.5	11.1	159
WM 58-8-65	909 cde	5.24	35.6	11.7	155
WM 53-3-31	908 cde	4.55	37.5	11.2	149
PD 5657	879 cde	4.59	38.3	10.5	160
Coker 80903	861 cde	4.78	35.8	10.8	164
Deltapine 7124-293	847 cde	4.07	39.2	10.2	156
PD 5717	830 de	4.06	38.5	10.6	156
Stoneville 1366	763 ef	3.48	41.3	11.1	177
Acala SJ-5	576 f	5.00	35.6	12.3	190

Table 134. High-quality test: Fiber data for College Station, Tex.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
a BD 434 RKR	1.14	0.55	205	6.0	4.25
Deltapine 7124-299	1.10	•54	213	5.6	5.05
Stoneville 213	1.12	•54	193	6.2	4.80
toneville 1181	1.14	• 55	205	4.5	4.80
a BD 453 RKR	1.11	•56	198	6.6	4.40
oker 76-114	1.10	•52	218	5.3	4.70
oker 310	1.12	•56	208	5.3	4.40
		•58	226	7.4	4.05
elcot 311	1.12			6.9	4.10
oker 76-110	1.14	•55	206		
o. 63-277-1B	1.16	•60	209	5.8	4.45
o. 73–1203	1.10	•58	212	7.2	3.85
M 58-8-65	1.15	• 58	205	6.2	4.60
M 53-3-31	1.12	•60	201	6.6	4.85
D 5657	1.12	• 57	206	5.3	4.35
oker 80903	1.14	• 58	208	5.8	4.30
eltapine 7124 <b>-</b> 293	1.13	• 56	221	6.4	5.00
D 5717	1.18	•58	218	5.3	4.30
toneville 1366	1.20	•61	238	5.0	4.65
cala SJ-5	1.17	•60	254	5.6	4.25
	Hio	h Volume Instru	ment	Colo	rimeter
		h Volume Instru			rimeter Hunter's
	UHM	Uniformity	Tenacity	$\frac{Colo}{R_d}$	Hunter's
a BD 434 RKR •••••	UHM	Uniformity	Tenacity		Hunter's
	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R <sub>d</sub>	Hunter's b value
eltapine 7124-299	UHM (inches)  1.18 1.09	Uniformity (percent) 85.0 84.0	Tenacity (g/tex) 24.0 27.5	62.5 66.8	Hunter's b value  11.2 11.4
eltapine 7124-299 toneville 213	UHM (inches) 1.18 1.09 1.14	Uniformity (percent) 85.0 84.0 83.5	Tenacity (g/tex) 24.0 27.5 24.0	62.5 66.8 63.5	Hunter's b value  11.2 11.4 11.5
eltapine 7124-299 toneville 213 toneville 1181	UHM (inches)  1.18 1.09 1.14 1.18	Uniformity (percent) 85.0 84.0 83.5 85.5	Tenacity (g/tex) 24.0 27.5 24.0 25.0	62.5 66.8 63.5 63.2	Hunter's b value  11.2 11.4 11.5 10.6
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR	UHM (inches) 1.18 1.09 1.14 1.18 1.10	Uniformity (percent) 85.0 84.0 83.5 85.5	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0	62.5 66.8 63.5 63.2 65.5	Hunter's b value  11.2 11.4 11.5 10.6 11.6
eltapine 7124-299 coneville 213 coneville 1181 a BD 453 RKR oker 76-114	UHM (inches) 1.18 1.09 1.14 1.18 1.10 1.11	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0 24.5	62.5 66.8 63.5 63.2 65.5 56.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 84.0	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 84.0	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 elcot 311 oker 76-110	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 84.0 85.0	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18	Uniformity (percent) 85.0 84.0 83.5 85.5 84.0 84.0 85.0 85.0 86.0	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 23.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 85.0 85.0 86.0	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.5 24.5 24.5 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203 M 58-8-65	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16	Uniformity (percent) 85.0 84.0 83.5 85.5 84.0 84.0 85.0 86.0 86.0 85.0	Tenacity (g/tex) 24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 64.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203 M 58-8-65 M 53-3-31	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16 1.16	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 84.0 85.0 85.0 86.0 85.0 85.0	Tenacity (g/tex)  24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 23.5 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 64.0 62.5	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203 M 58-8-65 D 5657	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16 1.16 1.16	Uniformity (percent) 85.0 84.0 83.5 85.5 84.0 84.0 85.0 86.0 86.0 85.0 86.0	Tenacity (g/tex)  24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 23.5 24.5 24.5 24.6	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 64.0 62.5 65.8 57.2	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0 10.5 10.5
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203 M 58-8-65 M 53-3-31 D 5657 oker 80903	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16 1.16 1.16 1.11	Uniformity (percent) 85.0 84.0 83.5 85.5 84.0 84.0 85.0 86.0 86.0 85.0 86.0 86.0 86.0	Tenacity (g/tex)  24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 23.5 24.0 23.5 24.0	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 64.0 62.5 65.8 57.2 66.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0 10.5 10.5 11.1
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203 M 58-8-65 D 5657 oker 80903 eltapine 7124-293	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16 1.16 1.16 1.11	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 84.0 85.0 86.0 86.0 85.0 86.0 85.5 84.0	Tenacity (g/tex)  24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 24.5 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 62.5 65.8 57.2 66.0 65.5	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0 10.5 10.5 11.1 9.9
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 elcot 311 oker 76-110 o. 63-277-1B o. 73-1203 M 58-8-65 M 53-3-31 D 5657 oker 80903 eltapine 7124-293 D 5717	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16 1.16 1.16 1.11	Uniformity (percent)  85.0 84.0 83.5 85.5 83.5 84.0 84.0 85.0 85.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0	Tenacity (g/tex)  24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 24.5 24.0 23.5 24.0 26.0 26.0 26.0	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 64.0 62.5 65.8 57.2 66.0	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0 10.5 10.5 11.1
eltapine 7124-299 toneville 213 toneville 1181 a BD 453 RKR oker 76-114 oker 310 oker 310 oker 76-110 oker 76-110 oker 73-1203 M 58-8-65 M 53-3-31 D 5657 oker 80903 eltapine 7124-293 D 5717 toneville 1366	UHM (inches)  1.18 1.09 1.14 1.18 1.10 1.11 1.12 1.08 1.14 1.18 1.12 1.16 1.16 1.16 1.11	Uniformity (percent) 85.0 84.0 83.5 85.5 83.5 84.0 84.0 85.0 86.0 86.0 85.0 86.0 85.5 84.0	Tenacity (g/tex)  24.0 27.5 24.0 25.0 24.0 24.5 24.5 24.5 24.5 24.5 24.5 24.5 24.5	62.5 66.8 63.5 63.2 65.5 56.0 61.5 65.2 63.0 64.0 62.5 65.8 57.2 66.0 65.5	Hunter's b value  11.2 11.4 11.5 10.6 11.6 10.8 11.2 11.4 11.8 11.0 12.4 11.0 10.5 10.5 11.1 9.9

Table 135. High-quality test: Yield, boll and yarn tenacity data for Portageville, Mo.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	1095 a	4.80	40 • 4	9.1	145
La BD 434 RKR	991 ab	5.75	38.2	11.6	140
Mo. 63-277-1B	952 abc	5.25	39.4	11.2	144
Delcot 311	948 abc	5.55	39.0	11.2	144
Coker 76-110	917 bcd	4.50	41.7	10.5	133
Stoneville 1181	892 bcd	3.95	37.4	10.1	134
Coker 76-114	873 bcd	4 • 80	40.4	10.2	126
Deltapine 7124-293	868 bcde	4.30	41.1	9.9	144
Coker 80903	846 bcdef	5.45	36.3	11.2	147
Stoneville 213	805 cdefg	5.95	38.3	11.5	140
PD 5657	800 cdefg	5.50	40.6	10.0	142
Coker 310	792 cdefg	4.95	39.8	9.8	120
La BD 453 RKR	786 cdefgh	4.90	38.6	10.7	136
Mo. 73-1203	753 defgh	4.95	35.8	12.0	142
WM 58-8-65	692 efgh	5.30	37.6	11.6	129
WM 53-3-31	684 fgh	5.50	38.5	11.1	116
PD 5717	682 fgh	4.90	39.1	10.4	148
Acala SJ-5	664 gh	5.55	39.2	11.9	164
Stoneville 1366	614 h	4.30	43.5	10.8	156

Table 136. High-quality test: Fiber data for Portageville, Mo.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
•	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
Deltapine 7124-299	1.08	0.48	200	6.2	5.10
La BD 434 RKR	1.09	•48	194	6.2	4.95
Mo. 63-277-1B	1.10	• 50	192	6.8	4.70
Delcot 311	1.08	•51	204	6.8	4.60
Coker 76-110	1.10	•50	190	6.6	4.85
Stoneville 1181	1.12	•48	196	5.0	5.05
Coker 76-114	1.07	• 47	186	5.3	5.00
Deltapine 7124-293 .	1.11	.48	194	5.3	4.70
Coker 80903	1.12	•49	198	5.2	4.45
Stoneville 213	1.12	• 50	187	6.2	4.45
PD 5657	1.08	•48	192	6.3	4.75
Coker 310	1.08	•48	179	5.6	5.35
La BD 453 RKR	1.08	•48	190	6.6	4.85
Mo . 73-1203	1.18	•52	216	6.0	4.35
WM 58-8-65	1.14	•50	197	7.2	4.65
WM 53-3-31	1.12	• 50	193	6.8	5.00
PD 5717	1.12	•46	201	5.5	4.75
Acala SJ-5	1.15	•51	225	5.6	4.60
Stoneville 1366	1.14	•50	220	4.8	4.95
Stolleville 1900	1.14	• 30	220	4.0	4.73
		n Volume Instru			cimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
				(0.0	
Deltapine 7124-299	1.12	83.5	27.5	68.U	9.7
_	1.12	83.5 82.5	27.5 24.5	68.0 69.5	9.7 9.2
La BD 434 RKR	1.14	82.5	24.5	69.5	9.2
La BD 434 RKR Mo. 63-277-1B	1.14 1.15	82.5 83.5	24.5 25.0	69.5 66.2	9.2 10.5
La BD 434 RKR Mo. 63-277-1B Delcot 311	1.14 1.15 1.09	82.5 83.5 84.0	24.5 25.0 25.0	69.5 66.2 69.0	9.2 10.5 10.0
La BD 434 RKR Mo. 63-277-1B Delcot 311 Coker 76-110	1.14 1.15 1.09 1.10	82.5 83.5 84.0 83.0	24.5 25.0 25.0 25.0	69.5 66.2 69.0 66.8	9.2 10.5 10.0 9.8
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181	1.14 1.15 1.09 1.10 1.16	82.5 83.5 84.0 83.0 82.0	24.5 25.0 25.0 25.0 25.0	69.5 66.2 69.0 66.8 65.0	9.2 10.5 10.0 9.8 9.3
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114	1.14 1.15 1.09 1.10 1.16 1.08	82.5 83.5 84.0 83.0 82.0 81.5	24.5 25.0 25.0 25.0 25.0 25.0	69.5 66.2 69.0 66.8 65.0 63.8	9.2 10.5 10.0 9.8 9.3 10.5
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293	1.14 1.15 1.09 1.10 1.16 1.08 1.16	82.5 83.5 84.0 83.0 82.0 81.5	24.5 25.0 25.0 25.0 25.0 25.0 29.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0	9.2 10.5 10.0 9.8 9.3 10.5 9.3
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.16	82.5 83.5 84.0 83.0 82.0 81.5 81.5	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5	69.5 66.2 69.0 66.8 65.0 63.8 67.0	9.2 10.5 10.0 9.8 9.3 10.5 9.3
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.16	82.5 83.5 84.0 83.0 82.0 81.5 81.5 82.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.16 1.18	82.5 83.5 84.0 83.0 82.0 81.5 81.5 82.0 82.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657  Coker 310	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08	82.5 83.5 84.0 83.0 82.0 81.5 81.5 82.0 82.5	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657  Coker 310  La BD 453 RKR	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08	82.5 83.5 84.0 83.0 82.0 81.5 81.5 82.0 82.0 82.5 82.5	24.5 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0 25.5	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0 68.5 66.2	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5 9.6
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657  Coker 310  La BD 453 RKR  Mo. 73-1203	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08 1.08	82.5 83.5 84.0 83.0 82.0 81.5 81.5 82.0 82.5 82.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0 25.5	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0 68.5 66.2	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5 9.6
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657  Coker 310  La BD 453 RKR  Mo. 73-1203  WM 58-8-65	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08 1.08 1.12	82.5 83.5 84.0 83.0 82.0 81.5 82.0 82.0 82.5 82.5 82.5 82.5 82.0 84.0 83.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0 25.5 24.5	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0 68.5 66.2 61.8 68.0	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5 9.6 9.6 9.4
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657  Coker 310  La BD 453 RKR  Mo. 73-1203  WM 58-8-65  WM 58-8-65	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08 1.08 1.12	82.5 83.5 84.0 83.0 82.0 81.5 82.0 82.0 82.5 82.5 82.0 84.0 83.0 82.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0 25.5 25.5 24.5 23.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0 68.5 66.2 61.8 68.0 67.5	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5 9.6 9.6 9.4
La BD 434 RKR  Mo. 63-277-1B  Delcot 311  Coker 76-110  Stoneville 1181  Coker 76-114  Deltapine 7124-293  Coker 80903  Stoneville 213  PD 5657  Coker 310  La BD 453 RKR  Mo. 73-1203  WM 58-8-65  WM 53-3-31  PD 5717	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08 1.08 1.21 1.18 1.12	82.5 83.5 84.0 83.0 82.0 81.5 82.0 82.0 82.5 82.5 82.5 82.0 84.0 83.0 82.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0 25.5 25.5 24.5 23.0 28.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0 68.5 66.2 61.8 68.0 67.5	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5 9.6 9.6 9.4 9.8
Deltapine 7124-299 La BD 434 RKR Mo. 63-277-1B Delcot 311 Coker 76-110 Stoneville 1181 Coker 76-114 Deltapine 7124-293 Coker 80903 Stoneville 213 PD 5657 Coker 310 La BD 453 RKR Mo. 73-1203 WM 58-8-65 WM 53-3-31 PD 5717 Acala SJ-5 Stoneville 1366	1.14 1.15 1.09 1.10 1.16 1.08 1.16 1.18 1.12 1.08 1.08 1.12	82.5 83.5 84.0 83.0 82.0 81.5 82.0 82.0 82.5 82.5 82.0 84.0 83.0 82.0	24.5 25.0 25.0 25.0 25.0 25.0 29.0 26.5 26.0 27.0 24.0 25.5 25.5 24.5 23.0	69.5 66.2 69.0 66.8 65.0 63.8 67.0 67.0 62.0 65.0 68.5 66.2 61.8 68.0 67.5	9.2 10.5 10.0 9.8 9.3 10.5 9.3 9.7 8.0 9.8 9.5 9.6 9.6 9.4

Table 137. High-quality test: Yield, boll and yarn tenacity data for Tifton, Ga.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
	070	5 01	40.0	10.0	1.50
PD 5657	979 a	5.21	40.2	10.2	158
Coker 76-110	891 ab	5.92	39.6	11.7	137
La BD 434 RKR	880 abc	5.78	37.9	11.9	158
Stoneville 1181	876 abcd	4.78	36.0	12.2	159
Deltapine 7124-299	846 abcd	5.15	35.6	10.2	150
Stoneville 213	810 abcd	5.62	37.3	11.8	137
WM 53-3-31	810 abcd	5.70	38.9	11.7	140
Coker 80903	805 abcd	5.96	38.9	11.7	142
La BD 453 RKR	796 abcd	4.96	39.4	11.3	155
PD 5717	775 bcd	5.04	38.7	11.4	154
Deltapine 7124-293	757 bcd	5.02	40.1	11.3	154
WM 58-8-65	740 bcd	6.06	36.5	12.1	139
Coker 310	730 bcd	6.05	37.6	10.7	151
Stoneville 1366	729 bcd	4.80	41.1	10.9	152
Delcot 311	705 bcd	6.12	37.1	11.5	146
Coker 76-114	703 bcd	5.65	38.1	11.4	136
Mo. 63-277-1B	696 cd	5.37	36.5	11.6	156
Mo. 73-1203	691 d	5.89	36.7	11.7	156
Acala SJ-5	446 e	5.75	37.4	11.9	176

Table 138. High-quality test: Fiber data for Tifton, Ga.

ariety	Digital F	ibrograph		meter	Micronai
,	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
	(Theres)	(Tirclies)	(univ) tex)		
D 5657	1.05	0.50	197	4.5	5.15
Soker 76-110	1.08	•51	199	6.8	4.65
a BD 434 RKR	1.10	•52	196	5.6	5.10
toneville 1181	1.10	•52	182	4.4	5.30
eltapine 7124-299	1.10	•51	211	5.8	5.50
toneville 213 ····	1.10	•50	184	6.0	5.30
M 53-3-31	1.06	•50	170	6.9	5.35
	1.08	•52	198	4.8	5.00
oker 80903			201	6.7	5.30
a BD 453 RKR	1.07	•52			
D 5717	1.12	•53	182	4.8	5.40
eltapine 7124-293	1.10	•50	210	5.9	5.00
M 58-8-65	1.10	•52	178	6.7	5.10
oker 310	1.10	•52	192	4.7	5.00
toneville 1366	1.10	• 53	198	4.2	5.60
elcot 311	1.02	•50	202	7.0	4.95
oker 76-114	1.10	• 52	196	5.0	5 • 40
o. 63-277-1B	1.10	•54	194	5.6	5.10
o. 73 <b>-</b> 1203	1.08	•50	207	5.2	5.15
cala SJ-5	1.12	•54	236	5.6	4.80
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
	(Thelies)	(1	(0. /		
D 5657	1.05	84.0	26.0	68.2	8.9
			26.0 23.5	68.0	9.6
oker 76-110	1.05	84.0	26.0		
oker 76-110 a BD 434 RKR	1.05 1.09	84.0 84.5	26.0 23.5	68.0	9.6
oker 76-110 a BD 434 RKR toneville 1181	1.05 1.09 1.08	84.0 84.5 84.0	26.0 23.5 24.5	68.0 72.2	9.6 8.4
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299	1.05 1.09 1.08 1.17	84.0 84.5 84.0 85.0	26.0 23.5 24.5 26.0	68.0 72.2 64.0	9.6 8.4 8.7
oker 76-110  a BD 434 RKR  toneville 1181  eltapine 7124-299  toneville 213	1.05 1.09 1.08 1.17 1.10	84.0 84.5 84.0 85.0 84.0	26.0 23.5 24.5 26.0 26.0	68.0 72.2 64.0 69.5	9.6 8.4 8.7 8.5
oker 76-110  a BD 434 RKR  toneville 1181  eltapine 7124-299  toneville 213  M 53-3-31	1.05 1.09 1.08 1.17 1.10 1.11	84.0 84.5 84.0 85.0 84.0 84.0	26.0 23.5 24.5 26.0 26.0 23.5	68.0 72.2 64.0 69.5 70.5	9.6 8.4 8.7 8.5 9.3
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10	84.0 84.5 84.0 85.0 84.0 84.0 84.5	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5	68.0 72.2 64.0 69.5 70.5 63.2 67.5	9.6 8.4 8.7 8.5 9.3 7.9 9.3
coker 76-110  a BD 434 RKR  toneville 1181  eltapine 7124-299  toneville 213  M 53-3-31  coker 80903  a BD 453 RKR	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10	84.0 84.5 84.0 85.0 84.0 84.5 84.0	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8	9.6 8.4 8.7 8.5 9.3 7.9 9.3
coker 76-110  a BD 434 RKR  toneville 1181  eltapine 7124-299  toneville 213  M 53-3-31  coker 80903  a BD 453 RKR  D 5717	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08	84.0 84.5 84.0 85.0 84.0 84.0 84.5 84.0 85.0	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3
oker 76-110  a BD 434 RKR  toneville 1181  eltapine 7124-299  toneville 213  M 53-3-31  oker 80903  a BD 453 RKR  D 5717  eltapine 7124-293	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14	84.0 84.5 84.0 85.0 84.0 84.5 84.0 85.0 84.0	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903 a BD 453 RKR D 5717 eltapine 7124-293 M 58-8-65	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12	84.0 84.5 84.0 85.0 84.0 84.5 84.0 85.0 84.5	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903 a BD 453 RKR D 5717 eltapine 7124-293 M 58-8-65 oker 310	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12 1.14	84.0 84.5 84.0 85.0 84.0 84.5 84.0 84.5 84.0 84.5 84.0	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5 23.5	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7 9.2 9.9
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903 a BD 453 RKR D 5717 eltapine 7124-293 M 58-8-65 oker 310 toneville 1366	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12 1.14	84.0 84.5 84.0 85.0 84.0 84.5 84.0 85.0 84.0 84.5 85.0 84.0	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5 23.5	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5 70.8	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7 9.2 9.9
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903 a BD 453 RKR D 5717 eltapine 7124-293 M 58-8-65 oker 310 toneville 1366 elcot 311	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12 1.14 1.12	84.0 84.5 84.0 85.0 84.0 84.0 84.5 84.0 85.0 84.0 84.5 85.0 84.0	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5 23.5 27.5 24.0	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5 70.8 66.8 70.0	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7 9.2 9.9 9.3
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903 a BD 453 RKR D 5717 eltapine 7124-293 M 58-8-65 oker 310 toneville 1366 elcot 311 oker 76-114	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12 1.14 1.12 1.14	84.0 84.5 84.0 85.0 84.0 84.5 84.0 85.0 84.0 84.5 85.0 84.0 84.5	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5 23.5 24.0	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5 70.8 66.8 70.0 69.8	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7 9.2 9.9 9.3 9.3
oker 76-110 a BD 434 RKR toneville 1181 eltapine 7124-299 toneville 213 M 53-3-31 oker 80903 a BD 453 RKR D 5717 eltapine 7124-293 M 58-8-65 oker 310 toneville 1366 elcot 311 oker 76-114 o. 63-277-1B	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12 1.14 1.12 1.14	84.0 84.5 84.0 85.0 84.0 84.0 84.5 84.0 85.0 84.0 84.5 85.0 84.5 85.0 84.5 85.0 84.5	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5 27.5 24.0 24.0	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5 70.8 66.8 70.0 69.8	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7 9.2 9.9 9.3 9.4 9.3
D 5657	1.05 1.09 1.08 1.17 1.10 1.11 1.08 1.10 1.08 1.14 1.12 1.14 1.12 1.14	84.0 84.5 84.0 85.0 84.0 84.5 84.0 85.0 84.0 84.5 85.0 84.0 84.5	26.0 23.5 24.5 26.0 26.0 23.5 22.5 23.5 26.0 27.5 27.0 23.5 23.5 24.0	68.0 72.2 64.0 69.5 70.5 63.2 67.5 68.8 64.5 71.8 70.5 70.8 66.8 70.0 69.8	9.6 8.4 8.7 8.5 9.3 7.9 9.3 9.3 8.7 7.7 9.2 9.9 9.3 9.3

Table 139. High-quality test: Yield, boll and yarn tenacity data for Florence, S.C.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
La BD 434 RKR	876 a	6.55	42.1	10.3	136
Deltapine 7124-299	871 ab	6.19	42.2	9.3	138
PD 5657	818 abc	6.05	42.5	10.2	148
Coker 76-110	804 abcd	6.39	44.8	10.4	122
Stoneville 1181	771 abcde	5.27	40.0	10.4	135
La BD 453 RKR	768 abcde	5.95	41.0	10.2	136
Stoneville 213	739 bcdef	5.87	41.9	10.0	122
Coker 310	739 bcdef	6.70	41.0	10.6	139
WM 58-8-65	719 cdef	6.23	42.6	11.0	134
Coker 80903	717 cdef	6.25	41.4	10.6	142
WM 53-3-31	716 cdef	6.31	42.4	10.5	138
Coker 76-114	704 cdef	5.51	42.3	9.3	128
Delcot 311	689 cdef	6.74	41.0	10.7	144
Deltapine 7124-293	680 cdef	5.82	42.8	10.5	136
Mo. 73-1203	665 def	6.43	39.8	11.1	148
PD 5717	658 ef	5.90	41.5	10.2	146
Mo. 63-277-1B	624 f	6.34	40.9	10.6	142
Stoneville 1366	605 f	6.24	44.5	10.5	140
Acala SJ-5	487 g	6.77	39.4	11.5	150

Table 140. High-quality test: Fiber data for Florence, S.C.

ariety	Digital F		Stelo	meter	Micronair
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
a BD 434 RKR	1.01	0.46	200	6.7	5.65
eltapine 7124-299	.99	•46	190	6.4	6.00
D 5657	1.01	• 46	205	5.8	5.10
oker 76-110	•98	.46	187	7.1	5.65
toneville 1181	1.00	• 46	190	5.4	5.80
a BD 453 RKR	1.00	•48	205	7.3	5.60
coneville 213	•96	• 46	178	6.6	5.85
oker 310	1.06	.49	200	5.8	5.45
4 58-8-65	1.00	.48	194	8.2	5.85
oker 80903	1.02	•46	184	5.6	5.20
1 53-3-31	1.01	. 49	182	8.5	5.80
oker 76-114	.98	<b>.</b> 46	182	5.6	5.75
lcot 311	.98	.48	184	8.0	5.45
eltapine 7124-293	.99	•47	186	5.8	5.70
73-1203	1.06	•49	200	6.2	5.35
5717	1.04	• 46	205	6.0	5.40
63-277-1B	1.00	• 46	204	6.6	5.15
coneville 1366	1.03	.48	214	5.6	5.75
TOHEATTIE TOOD ***	1.03	• 40			
	1 05	E 0			
	1.05	• 52	232	6.2	5.25
	Hig	h Volume Instru	ıment	Colo	orimeter
		h Volume Instru Uniformity	ment Tenacity		orimeter Hunter's
	Hig	h Volume Instru	ıment	Colo	orimeter
eala SJ-5	UHM (inches)	h Volume Instru Uniformity (percent)	Tenacity (g/tex)	$\frac{Colo}{R_{d}}$	orimeter Hunter's b value
ala SJ-5  BD 434 RKR	UHM (inches)	h Volume Instru Uniformity (percent) 82.5	Tenacity (g/tex)	Colo R <sub>d</sub> 69.8	Hunter's b value
ala SJ-5  BD 434 RKR eltapine 7124-299	High UHM (inches) 0.99 1.02	h Volume Instru Uniformity (percent) 82.5 82.0	Tenacity (g/tex)  24.0 26.0	Colo R <sub>d</sub> 69.8 68.8	Hunter's b value  8.7 9.4
ala SJ-5  BD 434 RKR eltapine 7124-299 0 5657	High UHM (inches) 0.99 1.02 .98	h Volume Instru Uniformity (percent) 82.5 82.0 81.5	Tenacity (g/tex) 24.0 26.0 25.0	Colo R <sub>d</sub> 69.8 68.8 68.2	Hunter's b value  8.7 9.4 8.8
ala SJ-5  BD 434 RKR  eltapine 7124-299  5657  oker 76-110	High UHM (inches) 0.99 1.02 .98 1.02	h Volume Instru Uniformity (percent) 82.5 82.0 81.5 82.0	Tenacity (g/tex) 24.0 26.0 25.0 23.0	Colo R <sub>d</sub> 69.8 68.8 68.2 69.0	Hunter's b value  8.7 9.4 8.8 10.4
ala SJ-5  BD 434 RKR  Eltapine 7124-299  5657  Sker 76-110  coneville 1181	High UHM (inches) 0.99 1.02 .98 1.02 1.06	h Volume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0	Tenacity (g/tex) 24.0 26.0 25.0 23.0 26.5	Colo R <sub>d</sub> 69.8 68.8 68.2 69.0 61.2	Hunter's b value  8.7 9.4 8.8 10.4 8.9
ala SJ-5	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5	Tenacity (g/tex) 24.0 26.0 25.0 23.0 26.5 25.0	69.8 68.8 68.2 69.0 61.2 67.8	8.7 9.4 8.8 10.4 8.9 9.7
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR coneville 213	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0	Tenacity (g/tex) 24.0 26.0 25.0 23.0 26.5 25.0 23.0	69.8 68.8 68.2 69.0 61.2 67.8 66.8	8.7 9.4 8.8 10.4 8.9 9.7
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR coneville 213 oker 310	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0	Tenacity (g/tex) 24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0	69.8 68.8 68.2 69.0 61.2 67.8 66.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7
ala SJ-5	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0	Tenacity (g/tex) 24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5	69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR coneville 213 oker 310 oker 310 oker 80903	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5	Colo  Rd  69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR coneville 213 oker 310 oker 310 oker 80903	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0	Tenacity (g/tex) 24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5	69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3
ala SJ-5	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5	Colo  Rd  69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR coneville 213 oker 310 oker 310 oker 80903 oker 80903 oker 76-114	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5	69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1 9.5 9.7
a BD 434 RKR eltapine 7124-299 0 5657 coneville 1181 a BD 453 RKR coneville 213 bker 310 6 58-8-65 coker 80903 6 53-3-31 coker 76-114 elcot 311	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99 .98	Nolume Instrument (percent)  82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 81.0 83.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5 23.0 23.5	Colo  Rd  69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8 67.8 68.2 66.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1 9.5 9.7
ala SJ-5  a BD 434 RKR  altapine 7124-299  b 5657  coneville 1181  a BD 453 RKR  coneville 213  bker 310  bker 310  coker 80903  bker 80903  coker 76-114  clcot 311  cltapine 7124-293	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99 .98 .96 1.02	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 81.5 82.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5 23.0 23.0 23.0	Colo  Rd  69.8  68.8  68.2  69.0  61.2  67.8  66.8  67.8  68.2  66.8  67.8  68.2  67.8	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.7 9.7 9.7 9.8
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR coneville 213 oker 310	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99 .98 .96 1.02 1.06	Nolume Instru Uniformity (percent) 82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 81.0 83.0 82.5	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5 23.0 23.0 24.0	Colo  Rd  69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8 67.8 68.2 66.8	8.7 9.4 8.8 10.4 8.9 9.7 9.3 9.1 9.5 9.7 9.4 9.8 9.8 9.6
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 coneville 1181 a BD 453 RKR oker 310	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99 .98 .96 1.02 1.06 1.03	Nolume Instrument (percent)  82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 83.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5 23.0 23.5 23.0 24.0 27.5	69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8 67.2 68.8 65.2 68.0 67.2	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1 9.5 9.7 9.4 9.8 9.8
a BD 434 RKR eltapine 7124-299 0 5657 oker 76-110 toneville 1181 a BD 453 RKR toneville 213 oker 310 oker 31	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99 .98 .96 1.02 1.06 1.03	Nolume Instruction (percent)  82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 81.0 83.0 82.0 82.5 83.0 82.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5 23.0 23.0 24.0 27.5 22.5	Colo  Rd  69.8  68.8  68.2  69.0  61.2  67.8  66.8  68.2  66.8  68.2  66.8  68.8  65.2  68.0  67.2  68.8  66.0  67.0	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1 9.5 9.7 9.4 9.8 9.8 9.8 9.6 9.1 9.2
a BD 434 RKR eltapine 7124-299 D 5657 oker 76-110 toneville 1181 a BD 453 RKR toneville 213 oker 310 M 58-8-65 oker 80903 M 53-3-31 eltapine 7124-293 o 73-1203 b 5717 toneville 1366 toneville 1366 toneville 1366	High UHM (inches) 0.99 1.02 .98 1.02 1.06 1.01 1.00 1.06 1.03 1.04 .99 .98 .96 1.02 1.06 1.03	Nolume Instrument (percent)  82.5 82.0 81.5 82.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 81.0 83.0 82.5 82.0 83.0	Tenacity (g/tex)  24.0 26.0 25.0 23.0 26.5 25.0 23.0 24.0 22.5 24.5 20.5 23.0 23.5 23.0 24.0 27.5	69.8 68.8 68.2 69.0 61.2 67.8 66.8 67.8 68.2 66.8 67.2 68.8 65.2 68.0 67.2	8.7 9.4 8.8 10.4 8.9 9.7 9.7 9.3 9.1 9.5 9.7 9.4 9.8 9.8

Table 141. High-quality test: Seed data for Florence, S.C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
La BD 434 RKR	18.5	3.94	0.85	9.9	5.5
Deltapine 7124-299	18.4	3.83	.93	11.7	5.0
PD 5657	17.1	3.77	. 84	10.6	
Coker 76-110	17.3	4.05	.81		5.0
	16.6	3.73		8.9	5.0
Stoneville 1181			.87	11.0	5.0
La BD 453 RKR	18.6	3.82	.91	11.3	5.0
Stoneville 213	15.8	3.80	.75	12.5	4.5
Coker 310	17.2	3.81	.75	12.2	4.0
WM 58-8-65	18.8	3.71	.76	8.4	5.5
Coker 80903	17.5	3.83	.80	12.1	5.0
WM 53-3-31	18.8	3.71	.91	8.7	6.0
Coker 76-114	16.7	3.72	.84	11.6	4.5
Delcot 311	17.9	4.07	.82	8.8	5.0
Deltapine 7124-293	16.7	3.87	.89	9.1	5.0
Mo. 73-1203	19.0	4.11	• 96	11.4	4.5
PD 5717	17.2	3.85	.80	11.6	4.0
Mo. 63-277-1B	18.6	4.10	1.02	10.2	5.5
Stoneville 1366	19.5	3.97	1.09	12.5	5.0
Acala SJ-5	17.6	3.91	.61	10.3	4.0
	Seed	Seed	Seed	Floaters	Acid-
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	delinted-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
La BD 434 RKR	volume (mm <sup>3</sup> ) 91.2	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Deltapine 7124-299	volume (mm <sup>3</sup> ) 91.2 77.0	surface area (mm <sup>2</sup> ) 106.3 95.0	density (g/cm <sup>3</sup> ) 1.048 1.082	(percent) 0.5 .0	delinted- seed index 9.5 8.4
Deltapine 7124-299 PD 5657	volume (mm <sup>3</sup> ) 91.2 77.0 87.3	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014	(percent)  0.5 .0 1.8	delinted- seed index 9.5 8.4 9.2
Deltapine 7124-299 PD 5657 Coker 76-110	91.2 77.0 87.3 92.0	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033	(percent)  0.5 .0 1.8 4.3	delinted- seed index 9.5 8.4 9.2 9.5
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181	91.2 77.0 87.3 92.0 89.3	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028	(percent)  0.5 .0 1.8 4.3 1.6	9.5 8.4 9.2 9.5 9.2
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181	91.2 77.0 87.3 92.0 89.3 85.7	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058	(percent)  0.5 .0 1.8 4.3 1.6 1.5	9.5 8.4 9.2 9.5 9.2 9.1
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181 La BD 453 RKR	91.2 77.0 87.3 92.0 89.3	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028	(percent)  0.5 .0 1.8 4.3 1.6	9.5 8.4 9.2 9.5 9.2 9.1 9.3
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213	91.2 77.0 87.3 92.0 89.3 85.7	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058	(percent)  0.5 .0 1.8 4.3 1.6 1.5	9.5 8.4 9.2 9.5 9.2 9.1
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181 La BD 453 RKR Stoneville 213 Coker 310	volume (mm <sup>3</sup> ) 91.2 77.0 87.3 92.0 89.3 85.7 84.1	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8	9.5 8.4 9.2 9.5 9.2 9.1 9.3
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181 La BD 453 RKR Stoneville 213 Coker 310	volume (mm <sup>3</sup> ) 91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8	9.5 8.4 9.2 9.5 9.2 9.1 9.3
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213  Coker 310  WM 58-8-65  Coker 80903	volume (mm <sup>3</sup> ) 91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.015	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213  Coker 310  WM 58-8-65  Coker 80903	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.067 1.063	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.3
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213  Coker 310  WM 58-8-65  Coker 80903  WM 53-3-31	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5 94.7	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9 109.0	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.067 1.015 1.063 1.018	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8 1.0	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.8 9.1
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213  Coker 310  WM 58-8-65  Coker 80903  WM 53-3-31  Coker 76-114  Delcot 311	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5 94.7 81.0	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9 109.0 98.2	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.067 1.063 1.018 1.061	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8 1.0 1.0	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.8 9.1
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181 La BD 453 RKR Stoneville 213 Coker 310 WM 58-8-65 WM 58-8-65 Coker 80903 WM 53-3-31 Delcot 311 Deltapine 7124-293	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5 94.7 81.0 91.8 89.9	surface area (mm <sup>2</sup> )  106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9 109.0 98.2 106.8 105.3	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.067 1.015 1.063 1.018 1.061 1.085	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8 1.0 1.0 .8	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.8 9.1
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213  Coker 310  WM 58-8-65  Coker 80903  WM 53-3-31  Coker 76-114  Deltapine 7124-293 Mo. 73-1203	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5 94.7 81.0 91.8 89.9 87.6	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9 109.0 98.2 106.8 105.3 103.5	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.063 1.018 1.061 1.085 1.047 1.126	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8 1.0 1.0 .8 1.3	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.8 9.1
Deltapine 7124-299 PD 5657 Coker 76-110 Stoneville 1181 La BD 453 RKR Stoneville 213 Coker 310 WM 58-8-65 Coker 80903 WM 53-3-31 Coker 76-114 Delcot 311 Deltapine 7124-293 Mo. 73-1203 PD 5717	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5 94.7 81.0 91.8 89.9 87.6 85.4	surface area (mm <sup>2</sup> )  106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9 109.0 98.2 106.8 105.3 103.5 101.8	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.067 1.015 1.063 1.018 1.061 1.085 1.047 1.126 1.078	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8 1.0 1.0 .8 1.3 .8 1.8	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.8 9.1 9.6 8.6 10.0 9.4 9.8 9.2
Deltapine 7124-299 PD 5657  Coker 76-110  Stoneville 1181  La BD 453 RKR  Stoneville 213  Coker 310  WM 58-8-65  Coker 80903  WM 53-3-31  Coker 76-114  Delcot 311	volume (mm <sup>3</sup> )  91.2 77.0 87.3 92.0 89.3 85.7 84.1 87.7 96.5 85.5 94.7 81.0 91.8 89.9 87.6	surface area (mm <sup>2</sup> ) 106.3 95.0 103.3 106.9 104.9 102.0 100.8 103.6 110.4 101.9 109.0 98.2 106.8 105.3 103.5	density (g/cm <sup>3</sup> ) 1.048 1.082 1.014 1.033 1.028 1.058 1.047 1.067 1.063 1.018 1.061 1.085 1.047 1.126	(percent)  0.5 .0 1.8 4.3 1.6 1.5 .8 .8 1.3 3.8 1.0 1.0 .8 1.3	9.5 8.4 9.2 9.5 9.2 9.1 9.3 9.3 9.3 9.8 9.1 9.6 8.6 10.0 9.4

Table 142. High-quality test: Yield, boll and yarn tenacity data for Belle Mina, Ala.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
***************************************					
Deltapine 7124-299	791 a	4.60	39.8	10.7	164
Deltapine 7124-293	764 ab	4.48	38.9	12.2	158
Stoneville 213	714 abc	4.70	37.4	12.3	133
Delcot 311	712 abc	5.40	37.7	12.7	164
La BD 434 RKR	701 bc	5.13	37.5	12.5	156
PD 5657	699 bc	4.60	38.7	11.8	174
Coker 76-114	679 cd	5.37	38.4	11.9	146
Stoneville 1181	664 cd	4.29	35.7	12.9	160
La BD 453 RKR	650 cde	4.93	38.8	11.7	160
Coker 80903	640 cdef	5.09	37.3	12.6	150
Stoneville 1366	617 defg	3.88	40.7	13.7	152
WM 53-3-31	599 defg	5.15	35.9	13.3	138
WM 58-8-65	581 efg	5.08	35.9	13.2	149
Coker 76-110	581 efg	4.09	39.7	13.5	146
Coker 310	573 efg	5.04	35.9	12.6	154
Mo. 73-1203	573 efg	4.81	36.5	13.1	166
PD 5717	561 fg	4.45	38.2	12.1	162
Mo. 63-277-1B	554 g	4.54	37.3	12.3	156
Acala SJ-5	434 h	5.00	36.5	13.5	168

Table 143. High-quality test: Fiber data for Belle Mina, Ala.

Variety	Digital F:	ibrograph	Stelo	meter	Micronaire
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
Deltapine 7124-299	1.14	0.52	218	6.2	5.15
Deltapine 7124-293	1.16	•54	215	6.2	4.80
toneville 213	1.14			7.0	
		• 53	187		5.15
elcot 311	1.10	•54	210	7.8	4.70
a BD 434 RKR	1.13	• 50	202	6.4	4.55
D 5657	1.16	• 55	210	5.8	4.85
oker 76-114	1.12	•51	194	5.8	5.20
toneville 1181	1.19	•55	206	5.8	5.25
a BD 453 RKR	1.13	• 54	215	7.6	4.95
oker 80903	1.16	•54	197	5.6	4.90
toneville 1366	1.16	•52	234	5.6	5.05
м 53-3-31	1.15	• 52	193	8.0	5.00
M 58-8-65	1.18	•54	190	7.6	4.75
oker 76-110	1.14	• 52	192	6.6	4.45
oker 310	1.17	•53	208	5.4	4.55
0. 73-1203	1.16	• 54	210	6.4	4.75
D 5717	1.20	•54	218	5.8	4.95
o. 63-277-1B	1.15	• 54	208	6.2	4.50
cala SJ-5	1.16	• 56	218	5.8	4.25
cata 5J-J ······	1.10	• 50	210	J•0	4.43
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	OTHI	OHITOTHIC	10110010)	-•α	
	(inches)	(percent)	(g/tex)	••a	<i>b</i> value
eltanina 7124-299	(inches)	(percent)	(g/tex)		
-	(inches)	(percent) 84.0	(g/tex) 27.5	74.0	11.7
eltapine 7124-293	(inches)  1.16 1.20	(percent) 84.0 83.5	(g/tex) 27.5 28.0	74.0 76.2	11.7
eltapine 7124-293 toneville 213	(inches)  1.16 1.20 1.19	(percent) 84.0 83.5 84.0	(g/tex) 27.5 28.0 25.5	74.0 76.2 68.2	11.7 10.3 10.6
eltapine 7124-293 toneville 213 elcot 311	1.16 1.20 1.19 1.12	(percent)  84.0 83.5 84.0 85.0	27.5 28.0 25.5 26.0	74.0 76.2 68.2 65.2	11.7 10.3 10.6 9.9
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR	(inches)  1.16 1.20 1.19 1.12 1.16	(percent)  84.0 83.5 84.0 85.0 83.5	(g/tex)  27.5 28.0 25.5 26.0 24.0	74.0 76.2 68.2 65.2 77.5	11.7 10.3 10.6 9.9 11.1
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657	(inches)  1.16 1.20 1.19 1.12 1.16 1.18	(percent)  84.0 83.5 84.0 85.0 83.5 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5	74.0 76.2 68.2 65.2 77.5 74.2	11.7 10.3 10.6 9.9 11.1 10.3
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20	(percent)  84.0 83.5 84.0 85.0 85.0 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5	74.0 76.2 68.2 65.2 77.5 74.2 69.8	11.7 10.3 10.6 9.9 11.1 10.3 11.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22	(percent)  84.0 83.5 84.0 85.0 83.5 85.0 84.5	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5 27.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20	(percent)  84.0 83.5 84.0 85.0 85.0 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5	74.0 76.2 68.2 65.2 77.5 74.2 69.8	11.7 10.3 10.6 9.9 11.1 10.3 11.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181 a BD 453 RKR	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22	(percent)  84.0 83.5 84.0 85.0 83.5 85.0 84.5	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5 27.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181 a BD 453 RKR oker 80903	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15	(percent)  84.0 83.5 84.0 85.0 85.0 85.0 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5 27.0 25.5	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181 a BD 453 RKR oker 80903 toneville 1366	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20	(percent)  84.0 83.5 84.0 85.0 85.0 85.0 85.0 85.0 84.5	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5 27.0 25.5 27.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181 a BD 453 RKR oker 80903 toneville 1366 M 53-3-31	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18	(percent)  84.0 83.5 84.0 85.0 85.0 85.0 85.0 85.0 84.5 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 27.0 25.5 27.0 30.5	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 9.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR b 5657 coker 76-114 toneville 1181 b a BD 453 RKR coker 80903 toneville 1366 m 53-3-31 m 58-8-65	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18 1.20	(percent)  84.0 83.5 84.0 85.0 83.5 85.0 85.0 84.5 85.0 84.5 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 27.0 25.5 27.0 30.5 23.5 25.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8 75.2 78.8	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 9.5 10.4 10.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 coker 76-114 toneville 1181 a BD 453 RKR coker 80903 toneville 1366 M 53-3-31 M 58-8-65 coker 76-110	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18 1.20 1.21	(percent)  84.0 83.5 84.0 85.0 85.0 85.0 85.0 84.5 85.0 83.5 84.5 84.5	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5 27.0 25.5 27.0 30.5 23.5 25.0 26.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8 75.2 78.8 64.8	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 9.5 10.4 10.5 12.1
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181 a BD 453 RKR oker 80903 toneville 1366 M 53-3-31 M 58-8-65 oker 76-110 oker 310	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18 1.20 1.24 1.18 1.20 1.21 1.22	(percent)  84.0 83.5 84.0 85.0 83.5 85.0 85.0 84.5 85.0 83.5 84.5 85.0 83.5	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 25.5 27.0 25.5 27.0 30.5 23.5 25.0 26.0 24.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8 75.2 78.8 64.8 73.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 11.3 9.5 10.4 10.5 12.1 11.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 oker 76-114 toneville 1181 a BD 453 RKR oker 80903 toneville 1366 M 53-3-31 M 58-8-65 oker 76-110 oker 310 oker 310	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18 1.20 1.24 1.18 1.20 1.22 1.22	(percent)  84.0 83.5 84.0 85.0 83.5 85.0 85.0 84.5 85.0 83.5 84.5 83.5 84.0 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 27.0 25.5 27.0 30.5 23.5 25.0 26.0 24.0 25.5	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8 75.2 78.8 64.8 73.2 72.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 9.5 10.4 10.5 12.1 11.5
eltapine 7124-293 toneville 213 elcot 311 a BD 434 RKR D 5657 coker 76-114 toneville 1181 a BD 453 RKR coker 80903 toneville 1366 M 53-3-31 M 58-8-65 coker 76-110 coker 310 D 5717	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18 1.20 1.24 1.18	(percent)  84.0 83.5 84.0 85.0 85.0 85.0 85.0 84.5 85.0 83.5 84.5 85.0 83.5 84.5 83.5 84.0 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 27.0 25.5 27.0 30.5 23.5 25.0 26.0 24.0 25.5 28.0	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8 75.2 78.8 64.8 73.2 72.2 74.5	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 9.5 10.4 10.5 12.1 11.5
Deltapine 7124-299 Deltapine 7124-293 Delcot 311 Delcot 312 Delcot 313 Delcot 314 Delcot 315 Delcot 316 Delcot 317 Delco	(inches)  1.16 1.20 1.19 1.12 1.16 1.18 1.20 1.22 1.15 1.20 1.24 1.18 1.20 1.24 1.18 1.20 1.22 1.22	(percent)  84.0 83.5 84.0 85.0 83.5 85.0 85.0 84.5 85.0 83.5 84.5 83.5 84.0 85.0	(g/tex)  27.5 28.0 25.5 26.0 24.0 28.5 27.0 25.5 27.0 30.5 23.5 25.0 26.0 24.0 25.5	74.0 76.2 68.2 65.2 77.5 74.2 69.8 70.2 76.2 73.2 65.8 75.2 78.8 64.8 73.2 72.2	11.7 10.3 10.6 9.9 11.1 10.3 11.5 11.1 11.3 9.5 10.4 10.5 12.1 11.5

Table 144. High-quality test: Seed data for Belle Mina, Ala.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Delta-dro 712/-200	18.4	3.54	0.76	11.5	3.5
Deltapine 7124-299 Deltapine 7124-293	16.9	3.53	•59	13.1	4.0
Stoneville 213	15.6	3.31	•65	17.0	3.0
Delcot 311	18.6	3.70	.76	11.8	4.5
La BD 434 RKR	18.1	3.38	.71	13.4	4.0
PD 5657	18.4	3.45	.71	13.4	4.5
Coker 76-114	17.4	3.41	•72	12.7	4.0
Stoneville 1181	16.9	3.40	•59	13.9	3.0
La BD 453 RKR ·····	18.6	3.53	•72	13.5	4.5
Coker 80903	19.2	3.60	.69	15.0	4.0
Stoneville 1366	19.8	3.75	•95	11.9	4.0
WM 53-3-31	17.6	3.26	•68	15.1	3.5
	17.5	3.25	•59	14.7	4.0
WM 58-8-65	18.5	3.76	•80	18.7	5.0
Coker 76-110			•64	8.3	4.0
Coker 310	17.9	3.51			
Mo. 73-1203	19.6	3.81	.86	13.3	4.5
PD 5717	17.8	3.52	•65	14.3	3.0
Mo. 63-277-1B	19.8	3.72	•85	12.2	4.5
Acala SJ-5	18.9	3.63	•49	11.9	3.5
	Seed	Seed	Seed	Floaters	Acid-
	Seed volume	Seed surface	Seed density	Floaters (percent)	Acid- delinted-
Doltoning 7124-200	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
Deltapine 7124-299	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent) 4.0	delinted- seed index
Deltapine 7124-293	volume (mm <sup>3</sup> ) 	surface area (mm <sup>2</sup> ) 105.5 117.0	density (g/cm <sup>3</sup> ) 1.052 1.009	(percent) 4.0 2.5	delinted- seed index 9.5 10.6
Deltapine 7124-293 Stoneville 213	volume (mm <sup>3</sup> ) 90.1 105.3 103.4	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6	density (g/cm <sup>3</sup> ) 1.052 1.009 .984	(percent)  4.0 2.5 1.5	delinted- seed index  9.5 10.6 10.2
Deltapine 7124-293 Stoneville 213 Delcot 311	90.1 105.3 103.4 103.0	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084	(percent)  4.0 2.5 1.5 .3	9.5 10.6 10.2 11.1
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR	90.1 105.3 103.4 103.0 105.9	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026	(percent)  4.0 2.5 1.5 .3 1.5	9.5 10.6 10.2 11.1 10.9
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657	90.1 105.3 103.4 105.9 97.0	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054	(percent)  4.0 2.5 1.5 .3 1.5 2.5	9.5 10.6 10.2 11.1 10.9
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3	9.5 10.6 10.2 11.1 10.9 10.2
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 120.8	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 120.8 119.7	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 11.7
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31 WM 58-8-65	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9 113.5	surface area (mm <sup>2</sup> ) 105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 120.8 119.7 123.1	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021 .995	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8 2.3	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 11.7
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31 WM 58-8-65 Coker 76-110	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9 113.5 104.3	surface area (mm <sup>2</sup> )  105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 112.9 120.8 119.7 123.1 116.2	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021 .995 1.058	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8 2.3 2.3	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 11.7 11.1
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31 WM 58-8-65 Coker 76-110 Coker 310	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9 113.5 104.3 112.5	surface area (mm <sup>2</sup> )  105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 112.9 120.8 119.7 123.1 116.2 122.3	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021 .995 1.058 1.030	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8 2.3 2.3 1.0	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 10.7 11.7 11.1 11.3
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31 WM 58-8-65 Coker 76-110 Coker 310 Mo. 73-1203	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9 113.5 104.3	surface area (mm <sup>2</sup> )  105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 112.9 120.8 119.7 123.1 116.2	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021 .995 1.058	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8 2.3 2.3	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 11.7 11.1
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31 WM 58-8-65 Coker 76-110 Coker 310 Mo. 73-1203	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9 113.5 104.3 112.5	surface area (mm <sup>2</sup> )  105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 112.9 120.8 119.7 123.1 116.2 122.3	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021 .995 1.058 1.030	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8 2.3 2.3 1.0	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 10.7 11.7 11.1 11.3
Deltapine 7124-293 Stoneville 213 Delcot 311 La BD 434 RKR PD 5657 Coker 76-114 Stoneville 1181 La BD 453 RKR Coker 80903 Stoneville 1366 WM 53-3-31 WM 58-8-65 Coker 76-110 Coker 310 Mo. 73-1203 PD 5717	volume (mm <sup>3</sup> )  90.1 105.3 103.4 103.0 105.9 97.0 99.5 113.8 99.8 99.7 110.5 108.9 113.5 104.3 112.5 109.1	surface area (mm <sup>2</sup> )  105.5 117.0 115.6 115.3 117.5 110.7 112.7 123.2 112.9 112.9 112.9 120.8 119.7 123.1 116.2 122.3 119.8	density (g/cm <sup>3</sup> ) 1.052 1.009 .984 1.084 1.026 1.054 1.047 .976 1.068 1.073 1.012 1.021 .995 1.058 1.030 1.046	(percent)  4.0 2.5 1.5 .3 1.5 2.5 .3 1.3 2.0 2.5 3.8 .8 2.3 1.0 1.8	9.5 10.6 10.2 11.1 10.9 10.2 10.4 11.1 10.7 11.7 11.1 11.3 11.1

Table 145. High-quality test: Yield, boll and yarn tenacity data for Stoneville, Miss.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
					<del></del>
La BD 434 RKR	783 a	5.29	39.5	10.4	144
Deltapine 7124-299	751 a	4.03	39.5	8.9	144
Stoneville 1181	710 ab	3.74	38.0	9.4	149
Stoneville 213	688 ab	4.64	40.5	9.3	140
WM 58-8-65	679 abc	5.34	40.7	10.5	134
Deltapine 7124-293	676 abc	4.41	41.8	9.1	156
La BD 453 RKR	605 bcd	4.71	39.0	9.7	147
WM 53-3-31	560 cde	5.08	40.4	10.2	144
Coker 76-114	500 def	4.51	39.2	9.5	143
Coker 76-110	498 def	4.83	41.2	10.3	138
Coker 80903	486 def	4.96	37.5	10.8	152
Coker 310	479 def	4.80	37.2	9.9	158
PD 5657	463 ef	4.53	39.5	9.5	152
Stoneville 1366	454 ef	4.47	41.8	10.0	162
Mo. 73-1203	431 ef	4.96	36.2	11.4	152
PD 5717	419 f	4.32	39.8	9.8	160
Acala SJ-5	409 f	5.56	38.4	11.2	176
Delcot 311	376 f	5.05	37.3	10.7	160
Mo. 63-277-1B	368 f	4.43	37.3	10.0	160

Table 146. High-quality test: Fiber data for Stoneville, Miss.

riety	Digital F	ibrograph	Stelo	meter	Micronair
•	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
BD 434 RKR	1.07	0.47	197	5.6	4.95
ltapine 7124-299	1.05	•47	198	5.4	5.25
coneville 1181	1.05	.48	178	4.7	5.20
	1.03	•48	176	5.4	5.30
coneville 213	1.07	• 50	194	6.7	5.30
1 58-8-65		• 46	184	5.4	5.05
ltapine 7124-293	1.06		204	6.6	4.85
BD 453 RKR	1.05	• 47			
53-3-31	1.05	•46	190	6.8	5.20
ker 76-114	1.06	•48	180	4.7	4.95
ker 76-110	1.03	•48	204	5 • 4	5.05
ker 80903	1.10	. 48	206	4.8	4.75
ker 310	1.10	•48	188	5.4	4.65
5657	1.03	•48	200	5.1	5.10
oneville 1366	1.06	•50	203	4.4	5.60
. 73-1203	1.10	.49	200	5.5	4.55
5717	1.06	•48	211	5.4	5.10
ala SJ-5	1.08	•50	218	5.4	4.90
lcot 311	1.04	•50	202	7.3	4.35
63-277-1B	1.04	•48	192	5.8	4.70
0. 05-277 ID	1.04	• +0			
,. UJ-2// ID	Hig	h Volume Instru	ıment	Colo	rimeter
,. UJ-277 ID	Hig UHM	h Volume Instru Uniformity	ment Tenacity		rimeter Hunter's
,. UJ-2// ID	Hig	h Volume Instru	ıment	Colo	rimeter
	UHM (inches)	h Volume Instru Uniformity (percent)	Tenacity (g/tex)	$\frac{\text{Color}}{R_d}$	rimeter Hunter's b value
BD 434 RKR	UHM (inches)	h Volume Instru Uniformity (percent) 81.5	Tenacity (g/tex)	Color R <sub>d</sub> 68.0	rimeter  Hunter's  b value  8.2
BD 434 RKR	Hig UHM (inches) 1.12 1.07	h Volume Instru Uniformity (percent) 81.5 82.0	Tenacity (g/tex)  22.0 25.0	Color R <sub>d</sub> 68.0 66.0	Hunter's b value  8.2 8.3
BD 434 RKR Eltapine 7124-299 Coneville 1181	Hig UHM (inches) 1.12 1.07 1.10	h Volume Instru Uniformity (percent) 81.5 82.0	Tenacity (g/tex) 22.0 25.0 23.0	Color Rd  68.0 66.0 60.5	Hunter's b value  8.2 8.3 8.5
BD 434 RKR eltapine 7124-299 coneville 1181	Hig UHM (inches) 1.12 1.07 1.10 1.04	h Volume Instru Uniformity (percent) 81.5 82.0 82.0 81.0	Tenacity (g/tex) 22.0 25.0 23.0 20.5	68.0 66.0 60.5 64.5	Hunter's b value  8.2 8.3 8.5 8.7
BD 434 RKR Eltapine 7124-299 Coneville 1181 Coneville 213	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12	h Volume Instru Uniformity (percent) 81.5 82.0 82.0 81.0 82.0	Tenacity (g/tex) 22.0 25.0 23.0 20.5 21.5	68.0 66.0 60.5 64.5 62.0	######################################
BD 434 RKR eltapine 7124-299 coneville 1181 coneville 213 f 58-8-65	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 81.0 82.0	Tenacity (g/tex) 22.0 25.0 23.0 20.5 21.5 23.5	68.0 66.0 60.5 64.5 62.0 63.8	######################################
BD 434 RKR  Itapine 7124-299  coneville 1181  58-8-65  Itapine 7124-293  BD 453 RKR	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 81.0 82.0 82.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0	68.0 66.0 60.5 64.5 62.0 63.8 64.8	######################################
BD 434 RKReltapine 7124-299 coneville 1181toneville 213f 58-8-65eltapine 7124-293 a BD 453 RKRf 53-3-31	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 81.0 82.0 82.0 82.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0 21.0	68.0 66.0 60.5 64.5 62.0 63.8 64.8	######################################
BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0 21.0 22.5	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8	######################################
BD 434 RKReltapine 7124-299 coneville 1181 coneville 213 f 58-8-65eltapine 7124-293 a BD 453 RKR f 53-3-31eker 76-114eker 76-110	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 82.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0 21.0 22.5 22.5	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2	######################################
BD 434 RKR eltapine 7124-299 coneville 1181 coneville 213 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 76-110 oker 80903	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 82.0 80.5	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0 21.0 22.5 22.5 23.5	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2	### Hunter's b value    8.2
a BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 80903 oker 310	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 82.0 80.5 80.0 81.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 22.0 21.0 22.5 22.5 23.5 21.5	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0	######################################
BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 80903 oker 310	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10 1.04	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 82.0 82.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 22.0 21.0 22.5 22.5 22.5 23.5 24.0	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0 63.8	### Hunter's b value    8.2
a BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 80903 oker 310	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 82.0 80.5 80.0 81.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 22.0 21.0 22.5 22.5 23.5 21.5	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0	######################################
BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 80903 oker 310	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10 1.04	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 82.0 82.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 22.0 21.0 22.5 22.5 22.5 23.5 24.0	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0 63.8	### Hunter's b value    8.2
BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 76-110 oker 310 oker 310 oker 310 oker 310	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10 1.12	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 80.5 80.0 81.0 80.5 80.0 81.0 80.5	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0 21.0 22.5 22.5 23.5 24.0 25.0	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0 63.8	### Hunter's b value    8.2
BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 76-110 oker 310 oker 310 oker 310 oxer 310 oxe	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10 1.04 1.12	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 82.0 82.0 82.0 82.0 80.5 80.0 81.0 80.5 81.0 81.0	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 23.5 22.0 21.0 22.5 22.5 23.5 21.5 22.5 23.5	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0 63.8 63.8 63.8	### Refer Hunter's b value ### Refer
BD 434 RKR eltapine 7124-299 coneville 1181 f 58-8-65 eltapine 7124-293 a BD 453 RKR f 53-3-31 oker 76-114 oker 76-110 oker 80903 oker 310 oker 310 oxer 310	Hig UHM (inches) 1.12 1.07 1.10 1.04 1.12 1.08 1.06 1.07 1.05 1.02 1.12 1.10 1.04 1.12	Nolume Instru Uniformity (percent) 81.5 82.0 82.0 81.0 82.0 82.0 82.0 81.0 80.5 80.0 81.0 80.5 81.0 80.5	Tenacity (g/tex)  22.0 25.0 23.0 20.5 21.5 22.0 21.0 22.5 22.5 22.5 23.5 21.5 22.0 21.0	68.0 66.0 60.5 64.5 62.0 63.8 64.8 66.8 64.2 65.2 59.8 64.0 63.8 63.8	### Refer Hunter's b value    8.2

Table 147. High-quality test: Yield, boll and yarn tenacity data for Jackson, Tenn.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Deltapine 7124-299	698 a	4.74	35.2	9.6	167
Stoneville 1181	664 ab	4.62	31.3	10.7	165
Stoneville 213	639 abc	5.05	33.8	10.2	151
La BD 453 RKR	629 abcd	4.69	32.7	10.4	168
La BD 434 RKR	607 bcde	5.47	31.2	11.6	164
Deltapine 7124-293	595 bcde	4.52	35.5	9.9	166
Coker 76-114	594 bcde	4.93	35.0	10.0	156
WM 53-3-31	593 bcdef	5.62	34.7	11.8	152
Coker 80903	583 cdefg	5.58	34.5	11.0	165
Coker 76-110	580 cdefg	5.49	37.4	10.3	130
WM 58-8-65	564 cdefgh	5.60	33.2	10.8	149
PD 5657	558 defgh	5.36	35.5	10.9	154
Delcot 311	547 efgh	6.16	32.1	11.8	155
Stoneville 1366	536 efghi	4.50	39.0	10.6	154
Mo. 63-277-1B	518 fghi	5.49	33.9	11.5	154
Mo. 73-1203	512 ghi	5.84	34.1	11.7	160
Acala SJ-5	492 hij	4.99	33.3	11.6	183
Coker 310	473 ij	4.58	33.5	11.2	163
PD 5717	435 j	4.84	36.2	10.0	167

Table 148. High-quality test: Fiber data for Jackson, Tenn.

Digital F	ibrograph	Stelo	meter	Micronaire
2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
(inches)	(inches)	(mN/tex)	(percent)	
1.11	0.52	208	5.9	4.85
				4.45
		194		4.40
				4.25
				4.20
				4.20
				4.30
				4.45
				4.15
				4.15
				4.50
				4.45
				3.95
				5.15
				4.00
				4.35
				3.90
				4.00
				4.65
				rimeter
	•	•	$R_d$	Hunter's
(inches)	(percent)	(g/tex)		b value
			61.5	
1.15	84.0	28.5	54.5	11./
1.15	84.0 81.5	28.5	64.5 71.5	11.7
1.18	81.5	29.0	71.5	12.3
1.18 1.20	81.5 84.5	29.0 24.5	71.5 73.8	12.3 12.7
1.18 1.20 1.22	81.5 84.5 84.0	29.0 24.5 28.5	71.5 73.8 66.5	12.3 12.7 12.1
1.18 1.20 1.22 1.18	81.5 84.5 84.0 83.0	29.0 24.5 28.5 28.5	71.5 73.8 66.5 66.0	12.3 12.7 12.1 10.9
1.18 1.20 1.22 1.18 1.20	81.5 84.5 84.0 83.0 83.0	29.0 24.5 28.5 28.5 30.5	71.5 73.8 66.5 66.0 75.2	12.3 12.7 12.1 10.9 11.1
1.18 1.20 1.22 1.18 1.20 1.19	81.5 84.5 84.0 83.0 83.0 84.5	29.0 24.5 28.5 28.5 30.5 26.0	71.5 73.8 66.5 66.0 75.2 70.0	12.3 12.7 12.1 10.9 11.1 12.4
1.18 1.20 1.22 1.18 1.20 1.19	81.5 84.5 84.0 83.0 83.0 84.5	29.0 24.5 28.5 28.5 30.5 26.0 25.0	71.5 73.8 66.5 66.0 75.2 70.0 70.2	12.3 12.7 12.1 10.9 11.1 12.4 12.6
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19	81.5 84.5 84.0 83.0 83.0 84.5 84.0	29.0 24.5 28.5 28.5 30.5 26.0 25.0	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19	81.5 84.5 84.0 83.0 83.0 84.5 84.5	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12	81.5 84.5 84.0 83.0 83.0 84.5 84.0 83.5 84.5	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12 1.18	81.5 84.5 84.0 83.0 83.0 84.5 84.5 84.0 83.5	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0 25.5	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0 73.0 71.2	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8 11.2
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12 1.18 1.17	81.5 84.5 84.0 83.0 83.0 84.5 84.0 83.5 84.0 84.0	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0 25.5 25.5 26.0	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0 73.0 71.2 73.2	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8 11.2
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12 1.18 1.17 1.08	81.5 84.5 84.0 83.0 83.0 84.5 84.5 84.0 84.5 84.0	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0 25.5 26.0 28.0	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0 73.0 71.2 73.2 71.2	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8 11.2
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12 1.18 1.17 1.08 1.16	81.5 84.5 84.0 83.0 83.0 84.5 84.0 83.5 84.5 84.0 84.0 84.0	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0 25.5 26.0 28.0 24.5	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0 71.2 73.2 71.2 64.5	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8 11.2 11.8
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12 1.18 1.17 1.08 1.16 1.14	81.5 84.5 84.0 83.0 84.5 84.0 83.5 84.0 84.0 84.0 84.0 84.0	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0 25.5 26.0 28.0 24.5 24.5	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0 73.0 71.2 73.2 71.2 64.5 72.5	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8 11.2 11.8 11.6 12.2 12.1
1.18 1.20 1.22 1.18 1.20 1.19 1.20 1.19 1.12 1.18 1.17 1.08 1.16	81.5 84.5 84.0 83.0 83.0 84.5 84.0 83.5 84.5 84.0 84.0 84.0	29.0 24.5 28.5 28.5 30.5 26.0 25.0 25.5 23.0 25.5 26.0 28.0 24.5	71.5 73.8 66.5 66.0 75.2 70.0 70.2 69.5 73.0 71.2 73.2 71.2 64.5	12.3 12.7 12.1 10.9 11.1 12.4 12.6 12.1 12.7 11.8 11.2 11.8
	2.5% S.L. (inches)  1.11 1.15 1.14 1.16 1.16 1.15 1.18 1.16 1.09 1.15 1.14 1.12 1.14 1.12 1.14 1.18 1.18 1.18	(inches) (inches)  1.11 0.52 1.15 .52 1.14 .52 1.16 .53 1.16 .54 1.18 .56 1.18 .56 1.19 .51 1.19 .54 1.19 .55 1.14 .54 1.12 .55 1.14 .54 1.14 .55 1.14 .55 1.15 .54 1.18 .56 1.18 .56 1.18 .56 1.18 .56 1.18 .56 1.18 .54 1.15 .54 1.19 .54 1.19 .55 1.10 .54 1.11 .55 1.11 .55 1.12 .55 1.14 .55 1.15 .54 1.15 .54	2.5% S.L. (inches) (inches) (mN/tex)  1.11 0.52 208 1.15 .52 210 1.14 .52 194 1.16 .53 222 1.16 .54 218 1.16 .55 200 1.18 .56 200 1.18 .56 200 1.18 .56 200 1.16 .54 214 1.09 .51 192 1.15 .54 206 1.14 .55 206 1.14 .54 207 1.12 .55 229 1.14 .55 209 1.14 .55 209 1.15 .54 207 1.11 .55 209 1.11 .55 211 1.11 .55 211 1.12 .55 229 1.13 .55 219 1.14 .55 214 1.18 .56 252 1.18 .56 252 1.18 .56 252 1.18 .57 211 1.15 .57 214	2.5% S.L. (inches) (mN/tex) (percent)  1.11

Table 149. High-quality test: Yield, boll and yarn tenacity data for Rocky Mount, N.C.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Stoneville 1181	579 a	4.66	38.1	9.9	144
Coker 76-110	573 a	4.98	43.1	9.3	125
		5.02			
Stoneville 213	566 ab	- · · - <del>-</del>	39.2	9.1	136
Deltapine 7124-299	535 abc	4.30	38.5	9.1	152
Coker 76-114	531 abcd	4.96	40.9	9.4	138
Deltapine 7124-293	529 abcd	4.94	40.0	10.0	154
Coker 80903	525 abcde	5.42	40.7	9.7	141
Coker 310	525 abcde	5.29	39.8	9.7	145
Delcot 311	517 bcde	5.55	38.9	10.0	154
Stoneville 1366	517 bcde	4.60	42.8	9.9	134
PD 5657	507 cdef	4.78	40.9	9.4	150
La BD 434 RKR	506 cdef	5.05	38.4	10.3	156
Acala SJ-5	499 cdef	6.31	38.8	11.2	178
La BD 453 RKR	482 cdef	5.03	38.0	9.8	148
WM 53-3-31	475 defg	5.45	39.1	10.2	140
Mo. 63-277-1B	470 efg	5.18	39.8	10.1	150
WM 58-8-65	458 fg	5.84	39.1	10.2	140
		4.21	40.4	9.6	
PD 5717	427 g				152
Mo. 73-1203	427 g	5.59	39.4	10.1	148

Table 150. High-quality test: Fiber data for Rocky Mount, N.C.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L.	50% S.L.	$T_1$	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
Stoneville 1181	1.02	0.47	194	5.4	4.90
Coker 76-110	•96	.44	168	7.4	4.50
Stoneville 213	.99	• 46	165	6.8	4.60
Deltapine 7124-299	1.00	•48	207	7.0	4.30
Coker 76-114	1.01	• 46	164	5.6	4.85
Deltapine 7124-293	1.03	•48	192	6.6	4.60
Coker 80903	1.02	•48	177	5.4	4.70
Coker 310	1.02	•47	180	6.4	4.40
Delcot 311	1.01	•50	205	8.2	4.45
Stoneville 1366	1.03	•48	200	4.8	5.20
PD 5657	1.00	•44	172	5.2	4.40
La BD 434 RKR	1.00	•46	198	6.2	4.10
Acala SJ-5	1.04	•52	234	5.6	4.60
		•50	190	7.4	4.55
La BD 453 RKR	1.04	•47			4.65
WM 53-3-31	1.02		188	7.5	
Mo. 63-277-1B	1.05	• 46	201	6.7	4.10
WM 58-8-65	1.03	•44	208	8.6	4.55
PD 5717	1.02	• 44	200	6.6	4.65
Mo. 73–1203	1.03	•48	182	6.5	4.40
		h Volume Instru			rimeter
	UHM	Uniformity	Tenacity	$R_{d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Stoneville 1181	1.02	83.5	24.0	68.2	8.8
	1.02	83.5 82.0	24.0	68.2 63.0	8.8
Coker 76-110	.97	82.0	21.5	63.0	10.3
Coker 76-110 Stoneville 213	.97 1.00	82.0 81.5	21.5 23.5	63.0 72.0	10.3 10.1
Coker 76-110 Stoneville 213 Deltapine 7124-299	.97 1.00 1.00	82.0 81.5 82.5	21.5 23.5 28.0	63.0 72.0 75.0	10.3 10.1 9.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114	.97 1.00 1.00 .98	82.0 81.5 82.5 82.0	21.5 23.5 28.0 22.5	63.0 72.0 75.0 70.8	10.3 10.1 9.4 9.7
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293	.97 1.00 1.00 .98 1.02	82.0 81.5 82.5 82.0 83.5	21.5 23.5 28.0 22.5 26.0	63.0 72.0 75.0 70.8 74.0	10.3 10.1 9.4 9.7 8.8
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903	.97 1.00 1.00 .98 1.02 1.02	82.0 81.5 82.5 82.0 83.5 84.0	21.5 23.5 28.0 22.5 26.0 21.5	63.0 72.0 75.0 70.8 74.0 70.2	10.3 10.1 9.4 9.7 8.8 9.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310	.97 1.00 1.00 .98 1.02 1.02	82.0 81.5 82.5 82.0 83.5 84.0 81.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2	10.3 10.1 9.4 9.7 8.8 9.4 10.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311	.97 1.00 1.00 .98 1.02 1.02 1.00	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0	10.3 10.1 9.4 9.7 8.8 9.4 10.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657 La BD 434 RKR	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.01	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657 La BD 434 RKR Acala SJ-5	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.01 .98 1.04 1.02	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.5 23.5 25.0 23.0 23.5 28.0	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0 74.2	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657 La BD 434 RKR Acala SJ-5 La BD 453 RKR	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.00 1.01 .98 1.04 1.02 1.04	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5 83.0 84.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.5 25.0 23.0 23.5 28.0 25.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0 74.2 73.2	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4 10.0 9.8 9.5
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657 La BD 434 RKR Acala SJ-5 La BD 453 RKR WM 53-3-31	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.00 1.01 .98 1.04 1.02 1.04 1.02	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5 83.0 84.5	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 25.0 23.5 25.0 23.5 28.0 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0 74.2 73.2 72.5	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 10.4 9.6 9.4 10.0 9.8 9.5
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657 La BD 434 RKR Acala SJ-5 La BD 453 RKR WM 53-3-31 Mo. 63-277-1B	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.00 1.01 .98 1.04 1.02 1.04 1.02 1.01	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5 83.0 84.5 84.0	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.0 23.0 23.5 28.0 25.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0 74.2 73.2 72.5 68.2	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4 10.0 9.8 9.5 9.9 9.8
Coker 76-110 Stoneville 213 Deltapine 7124-299 Coker 76-114 Deltapine 7124-293 Coker 80903 Coker 310 Delcot 311 Stoneville 1366 PD 5657 La BD 434 RKR Acala SJ-5 La BD 453 RKR WM 53-3-31 Mo. 63-277-1B WM 58-8-65	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.00 1.01 .98 1.04 1.02 1.04 1.02 1.04 1.02 1.04	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5 83.0 84.5 84.0 82.0	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.5 25.0 23.5 28.0 25.5 23.5 22.0 22.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0 74.2 73.2 72.5 68.2 70.8	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4 10.0 9.8 9.5 9.9 9.8 9.8
Stoneville 1181  Coker 76-110  Stoneville 213  Deltapine 7124-299  Coker 76-114  Deltapine 7124-293  Coker 80903  Coker 310  Delcot 311  Stoneville 1366  PD 5657  La BD 434 RKR  Acala SJ-5  La BD 453 RKR  WM 53-3-31  Mo. 63-277-1B  WM 58-8-65  PD 5717  Mo. 73-1203	.97 1.00 1.00 .98 1.02 1.02 1.00 1.00 1.00 1.01 .98 1.04 1.02 1.04 1.02 1.01	82.0 81.5 82.5 82.0 83.5 84.0 81.5 83.5 82.5 81.5 83.0 84.5 84.0	21.5 23.5 28.0 22.5 26.0 21.5 23.5 23.5 23.0 23.0 23.5 28.0 25.5 23.5	63.0 72.0 75.0 70.8 74.0 70.2 72.2 73.0 71.0 68.2 74.0 74.2 73.2 72.5 68.2	10.3 10.1 9.4 9.7 8.8 9.4 10.4 10.4 9.6 9.4 10.0 9.8 9.5 9.9 9.8

## PIMA REGIONAL COTTON VARIETY TEST

Table 151. Pima test: Yield, boll and yarn tenacity data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1084 a	3.36 d	39.2 a	12.8 ab	208 bc
P-45	1079 a	3.06 e	36.4 de	11.2 i	213 a
P-43	1043 ab	3.59 ab	36.2 ef	13.0 a	204 cd
P-48	1045 ab	3.46 bcd	38.3 b	12.6 cd	211 ab
	1014 bc	3.69 a	37.9 c	12.0 cd	199 e
Pima S-5	1014 bc	3.49 bcd		12.2 1g 12.4 de	
P-47			36.0 f		212 a
P-42	991 cd	3.44 bcd	37.8 c	11.8 h	202 de
P-44	981 cde	3.18 e	35.7 g	11.6 h	199 e
E-16	972 cde	3.46 bcd	36.3 de	12.7 g	204 cd
E-15	954 def	3.49 bcd	36.5 d	12.1 fg	202 de
P-46	935 ef	3.16 e	35.0 i	12.3 ef	208 bc
P-49	924 f	3.58 abc	35.7 g	12.7 bc	194 f
E-14	862 g	3.44 cd	35.2 h	12.8 ab	191 f
P-50	833 g	3.49 bcd	34.3 j	12.6 c	200 de

Table 152. Pima test: Fiber data by cotton variety

Variety ariety	Digital Fi	brograph	Stelo	meter	Micronaire
	2.5% S.L.	50% S.L.	T <sub>1</sub>	-	reading
	(inches)	(inches)	(mN/tex)	(percent)	
9-34	1.39 h	0.70 cdef	292 bc	7.1 bcd	4.63 ab
9-45	1.44 b	.71 abc	303 a	6.9 cde	4.48 bc
2-43	1.41 efg	.70 bcde	290 bcd	7.3 ab	4.52 bc
2–48	1.43 bcde	.72 a	293 Ъ	7.0 bcde	4.13 ef
oima S-5	1.40 gh	.69 efg	282 de	7.4 a	4.38 cd
9-47	1.42 defg	.71 abc	304 a	6.9 cde	4.70 a
9-42	1.45 a	.71 ab	277 ef	7.4 a	4.24 de
9-44	1.40 gh	.68 g	271 f	6.8 de	4.30 d
-16	1.42 bcdef	.69 defg	293 Ъ	6.7 e	4.04 f
-15	1.41 fg	.69 efg	280 e	7.0 bcde	4.14 ef
9-46	1.44 bc	.71 abc	291 bc	6.9 cde	4.28 de
-49	1.42 cdef	.70 cdef	279 ef	7.4 a	4.51 bc
;-14	1.43 bcde	.68 fg	276 ef	7.2 abc	4.46 c
-50	1.43 bcd	.70 abcd	283 cde	7.4 a	4.24 de
		Volume Instru			rimeter
	UHM	Uniformity	•	$R_d$	Hunter's
	(inches)	(percent)	(g/tex) 		b value
· <del>-</del> 34	(inches)	(percent) 87.0 a	(g/tex) 	63.0 d	
					13.0 a
<b>-</b> 45	1.38 a 1.36 a	87.0 a 85.5 abc	40.4 ab 39.8 abc	64.8 abcd	13.0 a 11.6 d
-45 -43	1.38 a 1.36 a 1.32 abc	87.0 a 85.5 abc 86.7 ab	40.4 ab 39.8 abc 37.4 cd	64.8 abcd 65.1 abc	13.0 a 11.6 d 12.2 bc
-45 -43	1.38 a 1.36 a 1.32 abc 1.40 a	87.0 a 85.5 abc 86.7 ab 86.7 ab	40.4 ab 39.8 abc 37.4 cd 36.8 d	64.8 abcd 65.1 abc 66.8 a	13.0 a 11.6 d 12.2 bc 11.9 cd
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc	40.4 ab 39.8 abc 37.4 cd	64.8 abcd 65.1 abc 66.8 a 66.1 ab	13.0 a 11.6 d 12.2 bc
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab 1.37 a	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc 86.8 ab	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd 41.0 a	64.8 abcd 65.1 abc 66.8 a 66.1 ab 64.9 abcd	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd 12.1 bcd
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd	64.8 abcd 65.1 abc 66.8 a 66.1 ab	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab 1.37 a 1.22 c	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc 86.8 ab 85.0 bc 84.6 c	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd 41.0 a 39.4 abc	64.8 abcd 65.1 abc 66.8 a 66.1 ab 64.9 abcd 65.5 abc 65.7 abc	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd 12.1 bcd 12.3 bc 12.2 bc
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab 1.37 a 1.22 c 1.37 a 1.31 abc	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc 86.8 ab 85.0 bc 84.6 c 85.4 abc	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd 41.0 a 39.4 abc 38.6 abcd 39.8 abc	64.8 abcd 65.1 abc 66.8 a 66.1 ab 64.9 abcd 65.5 abc 65.7 abc 65.8 abc	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd 12.1 bcd 12.3 bc 12.2 bc 12.5 b
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab 1.37 a 1.22 c 1.37 a 1.31 abc 1.38 a	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc 86.8 ab 85.0 bc 84.6 c 85.4 abc	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd 41.0 a 39.4 abc 38.6 abcd 39.8 abc 37.4 cd	64.8 abcd 65.1 abc 66.8 a 66.1 ab 64.9 abcd 65.5 abc 65.7 abc 65.8 abc 64.0 bcd	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd 12.3 bc 12.2 bc 12.5 b
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab 1.37 a 1.22 c 1.37 a 1.31 abc 1.38 a 1.35 a	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc 86.8 ab 85.0 bc 84.6 c 85.4 abc 85.4 abc 84.6 c	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd 41.0 a 39.4 abc 38.6 abcd 39.8 abc 37.4 cd 37.7 cd	64.8 abcd 65.1 abc 66.8 a 66.1 ab 64.9 abcd 65.5 abc 65.7 abc 65.8 abc 64.0 bcd 66.0 abc	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd 12.1 bcd 12.3 bc 12.2 bc 12.5 b 12.1 bcd 12.3 bc
-45	1.38 a 1.36 a 1.32 abc 1.40 a 1.34 ab 1.37 a 1.22 c 1.37 a 1.31 abc 1.38 a	87.0 a 85.5 abc 86.7 ab 86.7 ab 85.2 bc 86.8 ab 85.0 bc 84.6 c 85.4 abc	40.4 ab 39.8 abc 37.4 cd 36.8 d 38.0 bcd 41.0 a 39.4 abc 38.6 abcd 39.8 abc 37.4 cd	64.8 abcd 65.1 abc 66.8 a 66.1 ab 64.9 abcd 65.5 abc 65.7 abc 65.8 abc 64.0 bcd	13.0 a 11.6 d 12.2 bc 11.9 cd 12.1 bcd 12.1 bcd 12.3 bc 12.2 bc 12.5 b 12.1 bcd

Table 153. Pima test: Seed data by cotton variety

		(percent)		grade
00.0	0 /0 : 1	0.71.6	- 7/	
22.2 g	3.42 bcde	0.71 fg	1.74 g	12.3 a
				11.4 ef
				11.2 g
		•	•	11.8 bcd
				11.9 bc 11.8 bcd
				11.6 def
				11.0 del
				11.7 cd
				11.7 cde
				12.0 b
				11.6 def
				11.6 def
				11.8 bcd
22.7 Cu	3430 450	100 40	2100 040	1100 000
Seed	Seed	Seed	Floaters	Acid-
volume	surface	density	(percent)	delinted-
(mm <sup>3</sup> )	area (mm²)	(g/cm <sup>3</sup> )		seed index
129.0 a	133.9 a	1.000 bcd	3.1 bc	12.8 a
				11.2 g
				12.8 a
				12.6 ab
				12.2 de
			2.3 cd	12.3 bcde
119.1 e			3.9 b	11.6 f
113.6 f	•			11.4 fg
119.9 de	127.5 fg	1.010 abc	2.1 cd	12.1 e
120.6 cde	~	1.020 a	1.8 d	12.2 cde
126.8 ab	131.0 bcd		3.1 bc	12.4 bcd
128.5 a	133.4 a	.996 cd	1.9 d	12.6 ab
126.5 ab			1.4 d	12.7 a
123.9 bc	130.4 cde	1.017 a	2.2 cd	12.5 abc
	volume (mm <sup>3</sup> )  129.0 a 115.0 f 127.6 a 129.5 a 123.5 bc 122.6 cd 119.1 e 113.6 f 119.9 de 120.6 cde 126.8 ab 128.5 a 126.5 ab	24.2 a  21.4 h  3.42 bcde  23.4 b  3.44 abcd  22.4 fg  3.40 def  22.7 def  3.32 f  22.1 g  3.49 abcd  23.2 bc  3.52 ab  22.9 cd  3.53 a  22.6 def  22.1 g  3.44 abcd  22.8 cde  3.46 abcd  22.9 cd  3.50 abc   Seed  volume (mm³)  129.0 a  115.0 f  127.6 a  124.0 h  127.6 a  129.5 a  134.2 a  123.5 bc  130.1 bc  129.5 a  123.5 bc  130.1 bc  129.6 cd  129.4 def  119.1 e  126.9 g  113.6 f  126.9 g  113.6 f  127.5 fg  120.6 cde  128.2 efg  120.6 cde  128.2 efg  128.5 a  131.0 bcd  128.5 a  131.9 abc	24.2 a 3.40 cdef .82 cd 21.4 h 3.42 bcde .65 g 23.4 b 3.44 abcd .80 de 22.4 fg 3.40 def .80 de 22.7 def 3.32 f .74 ef 22.1 g 3.49 abcd .92 a 23.2 bc 3.52 ab .96 a 22.9 cd 3.53 a .91 a 22.6 def 3.34 ef .80 de 22.1 g 3.44 abcd .83 bcd 22.8 cde 3.46 abcd .88 abc 22.9 cd 3.50 abc .80 de  Seed Seed Seed density (g/cm³)  129.0 a 133.9 a 1.000 bcd 115.0 f 124.0 h .978 ef 127.6 a 132.9 ab 1.008 abc 129.5 a 134.2 a .974 f 123.5 bc 130.1 bc .998 de 122.6 cd 129.4 def 1.006 abc 119.1 e 126.9 g .979 ef 113.6 f 123.0 h 1.011 ab 119.9 de 127.5 fg 1.010 abc 120.6 cde 128.2 efg 1.020 a 126.8 ab 131.0 bcd .981 ef 128.5 a 133.4 a .996 cd 128.5 a 133.4 a .996 cd 128.5 ab 131.9 abc 1.008 abc	24.2 a

Table 154. Pima test: Yield, boll and yarn tenacity data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
Safford, Ariz.					
(Curtis farm)	1210 a	3.31 c	38.3 a	11.4 g	199 c
Wenden, Ariz	1173 a	3.31 c	35.8 d	12.4 bc	209 a
Salome, Ariz	1092 Ъ	3.21 cd	36.9 c	11.8 f	208 a
Fabens, Tex	1054 Ъ	3.59 b	38.1 a	12.3 cd	194 d
Marana, Ariz.					
(Station)	1054 ъ	3.62 b	37.0 c	12.1 e	208 a
Phoenix, Ariz	1037 Ъ	3.08 d	33.8 g	12.1 de	207 a
Marana, Ariz.					
(Clark farm)	841 c	3.98 a	34.5 f	14.0 a	203 Ъ
Coolidge, Ariz	806 c	3.04 d	35.0 e	12.1 de	207 a
Safford, Ariz.					20, 4
(Layton farm)	785 c	3.50 b	37.6 ъ	12.4 bc	202 ъ
El Paso, Tex	675 d	3.55 b	37.6 b	12.6 b	196 cd
11 1 450, 1CA	0,3 a	3.33.0	37.00	12.00	170 Cd

Table 155. Pima test: Fiber data by test location

Location	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
G 55 1 A					
Safford, Ariz. (Curtis farm)	1.38 d	0.67 e	279 cd	7.1 cd	4.32 bc
Wenden, Ariz	1.43 b	.70 bc	290 abc	6.8 ef	4.23 cd
Salome, Ariz	1.42 b	.70 bc	296 a	6.6 f	4.35 bc
Fabens, Tex Marana, Ariz.	1.40 c	•69 cd	278 d	7.7 a	4.38 abc
(Station)	1.43 b	•72 a	293 a	6.8 ef	4.47 ab
Phoenix, Ariz	1.39 cd	•68 d	277 d	7.2 cd	4.38 abc
Marana, Ariz.					
(Clark farm)	1.46 a	.73 a	281 bcd	7.2 cd	4.57 a
Coolidge, Ariz Safford, Ariz.	1.43 b	.69 bcd	296 a	7.3 bc	4.11 d
(Layton farm)	1.43 b	.70 b	291 ab	7.0 de	4.41 abc
El Paso, Tex	1.43 b	.70 bc	288 abcd	7.5 ab	4.41 abc
	Hig	h Volume Instru	ıment Col		rimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
Safford, Ariz.					
(Curtis farm)	1.37 a	84.9 bc	39.0 bc	65.6 ab	12.6 a
Wenden, Ariz	1.37 a	85.5 abc	37.9 cd	65.9 ab	12.1 bc
Salome, Ariz	1.39 a	85.3 bc	40.2 ab	65.9 ab	12.4 abc
Fabens, Tex Marana, Ariz.	1.36 a	86.5 a	38.6 bcd	64.9 abc	12.3 abc
(Station)	1.33 ab	86.0 ab	36.8 d	62.9 c	12.1 bc
Phoenix, Ariz Marana, Ariz.	1.38 a	86.5 a	38.4 bcd	66.2 a	12.0 bc
(Clark farm)	1.24 b	84.6 c	37.8 cd	63.8 bc	12.0 bc
Coolidge, Ariz Safford, Ariz.	1.34 a	84.9 bc	41.1 a	64.9 abc	12.1 bc
(Layton farm)	1.31 ab	85.8 ab	41.4 a	65.7 ab	12.5 ab
El Paso, Tex	1.31 ab	85.4 abc	39.2 bc	65.1 ab	12.2 abc

Table 156. Pima test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Safford, Ariz.					
(Curtis farm)	22.6 cd	3.37 d	0.87 bc	1.48 de	11.5 b
Wenden, Ariz	22.4 de	3.46 c	.85 cd	3.17 c	11.4 b
Salome, Ariz	23.0 b	3.25 ef	.80 d	3.71 b	11.5 b
Fabens, Tex Marana, Ariz.	22.1 e	3.60 b	.87 bc	1.91 d	11.9 a
(Station)	23.7 a	3.18 f	•96 a	2.92 c	11.8 a
Phoenix, Ariz Marana, Ariz.	22.8 bcd	3.68 a	.41 e	4.90 a	11.1 c
(Clark farm)	23.4 a	3.55 b	•98 a	1.40 e	12.1 a
Coolidge, Ariz Safford, Ariz.	21.7 f	3.41 cd	.81 cd	3.78 b	11.5 b
(Layton farm)	22.8 bc	3.29 e	.81 cd	1.77 de	11.8 a
El Paso, Tex	22.1 e	3.47 c	.89 b	1.45 de	12.0 a
	Seed volume	Seed surface	Seed density	Floaters (percent)	Acid- delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
Safford, Ariz.					
(Curtis farm)	121.4 d	128.6 d	0.961 d	2.8 ab	11.6 e
Wenden, Ariz	118.3 e	125.9 e	1.022 c	2.7 ab	12.1 cd
Salome, Ariz	111.8 g	121.5 g	1.040 Ъ	1.9 bc	11.6 e
Fabens, Tex Marana, Ariz.	130.4 c	134.9 c	•933 e	2.8 ab	12.2 cd
	116.1 ef	125.1 ef	1.040 Ъ	1.7 c	12.0 d
(Station)	116.1 ef 115.3 f	125.1 ef 123.7 f	1.040 b 1.041 ab	1.7 c 2.7 ab	12.0 d 12.0 d
(Station) Phoenix, Ariz		125.1 ef 123.7 f	1.040 b 1.041 ab	1.7 c 2.7 ab	12.0 d 12.0 d
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm)	115.3 f 132.1 bc	123.7 f 136.1 bc	1.041 ab 1.051 a	2.7 ab 1.9 bc	12.0 d 13.8 a
(Station) Phoenix, Ariz Marana, Ariz.	115.3 f	123.7 f	1.041 ab	2.7 ab	12.0 d
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Coolidge, Ariz	115.3 f 132.1 bc	123.7 f 136.1 bc	1.041 ab 1.051 a	2.7 ab 1.9 bc	12.0 d 13.8 a

Table 157. Pima test: Combined yield, boll and yarn tenacity data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-43	1136 a	3.65 ab	35.4 d	13.2 a	206 def
P-45	1136 a	2.99 f	35.5 d	11.2 f	217 a
P-34	1134 a	3.34 de	38.2 a	12.8 b	211 bcd
P-48	1122 a	3.47 cde	37.4 Ъ	12.6 c	215 ab
P-42	1091 a	3.44 cde	36.9 c	11.9 d	204 ef
Pima S-5	1075 ab	3.72 a	37.0 c	12.5 c	202 fg
P-47	1020 bc	3.52 bc	34.9 e	12.6 c	217 a
P-44	1006 c	3.14 f	34.7 ef	11.7 e	202 efg
P-46	987 c	3.10 f	34.2 g	12.4 c	212 abc
E-16	982 c	3.33 de	35.5 d	12.1 d	208 cde
E-15	970 c	3.38 cde	35.7 d	12.1 d	206 def
P-49	887 d	3.49 bcd	34.4 fg	12.9 b	198 gh
E-14	829 d	3.30 e	34.2 g	12.9 b	194 h
P-50	765 e	3.35 cde	33.2 h	12.9 b	206 def

Table 158. Pima test: Combined fiber data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

ariety	Digital F	ibrograph	Stelo	Stelometer	
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
-43	1.42 bc	0.71 abcde	292 abc	7.1 abc	4.49 abc
-45	1.44 ab	.71 abcd	306 a	6.8 cde	4.49 abc
-34	1.40 d	.71 abcde	294 ab	6.8 cde	4.55 ab
-48	1.43 b	.72 a	296 ab	7.0 abcd	4.10 fg
-42	1.45 a	.72 ab	278 cd	7.3 ab	4.39 bcd
ima S-5	1.41 cd	.70 cdef	282 bcd	7.4 a	4.40 bcd
-47	1.43 bc	.72 ab	305 a	6.9 bcde	4.62 a
-44	1.40 d	.69 ef	274 d	6.7 de	4.31 cde
-46	1.44 ab	.71 abc	294 ab	6.8 cde	4.18 efg
-16	1.43 bc	.69 def	294 ab	8.6 e	4.05 g
-15	1.41 cd	.69 def	284 bcd	6.7 cde	4.12 fg
-49	1.42 bc	.70 bcdef	283 bcd	7.2 abc	4.52 ab
-14	1.43 bc	.68 f	277 d	7.1 abc	4.42 bcd
-50	1.44 ab	.71 abcd	286 bcd	7.2 ab	4.27 def
		h Volume Instru			rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
				•	
	(inches)	(percent)	(g/tex)		b value
-43	(inches)  1.32 ab	(percent) 	(g/tex) 38.0 abc	65.0 abc	<i>b</i> value  12.1 bc
-45	1.32 ab	86.7 a	38.0 abc	65.0 abc	12.1 bc
-45 -34	1.32 ab 1.36 a	86.7 a 85.7 ab	38.0 abc 37.8 bc	65.0 abc 64.1 abc	12.1 bc 11.3 c
-45	1.32 ab 1.36 a 1.39 a	86.7 a 85.7 ab 86.8 a	38.0 abc 37.8 bc 40.2 ab	65.0 abc 64.1 abc 63.2 c	12.1 bc 11.3 c 12.9 a
-4545 -3448 -42	1.32 ab 1.36 a 1.39 a 1.39 a	86.7 a 85.7 ab 86.8 a 86.2 ab	38.0 abc 37.8 bc 40.2 ab 36.0 c	65.0 abc 64.1 abc 63.2 c 66.8 a	12.1 bc 11.3 c 12.9 a 11.8 bc
-45	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc
-4545484842	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b 1.36 a	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab 85.2 ab	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc 39.2 ab	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc 66.5 a	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc 12.1 bc
-45	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b 1.36 a 1.37 a	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab 85.2 ab 86.9 a	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc 39.2 ab 40.9 a	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc 66.5 a 64.5 abc	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc 12.1 bc 12.0 bc
-45	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b 1.36 a 1.37 a 1.36 a 1.35 ab	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab 85.2 ab 86.9 a 84.8 ab 84.0 b	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc 39.2 ab 40.9 a 38.8 abc 38.1 abc	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc 66.5 a 64.5 abc 66.4 ab 65.8 abc	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc 12.1 bc 12.0 bc 12.0 bc 12.0 bc
-43	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b 1.36 a 1.37 a 1.36 a	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab 85.2 ab 86.9 a 84.8 ab 84.0 b	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc 39.2 ab 40.9 a 38.8 abc 38.1 abc 38.6 abc	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc 66.5 a 64.5 abc 66.4 ab 65.8 abc 65.6 abc	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc 12.1 bc 12.0 bc 12.0 bc 12.0 bc 12.0 bc
-45	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b 1.36 a 1.37 a 1.36 a 1.35 ab 1.38 a 1.39 a	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab 85.2 ab 86.9 a 84.8 ab 84.0 b 85.7 ab 85.5 ab	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc 39.2 ab 40.9 a 38.8 abc 38.1 abc 38.6 abc 37.6 bc	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc 66.5 a 64.5 abc 66.4 ab 65.8 abc 65.6 abc 64.0 abc	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc 12.1 bc 12.0 bc 12.0 bc 12.0 bc 12.4 ab 12.2 ab
-45 -34 -48 -42 -42 -47 -44 -46 -16 -15	1.32 ab 1.36 a 1.39 a 1.39 a 1.21 b 1.36 a 1.37 a 1.36 a 1.35 ab 1.38 a	86.7 a 85.7 ab 86.8 a 86.2 ab 84.8 ab 85.2 ab 86.9 a 84.8 ab 84.0 b	38.0 abc 37.8 bc 40.2 ab 36.0 c 38.5 abc 39.2 ab 40.9 a 38.8 abc 38.1 abc 38.6 abc	65.0 abc 64.1 abc 63.2 c 66.8 a 65.0 abc 66.5 a 64.5 abc 66.4 ab 65.8 abc 65.6 abc 64.0 abc 63.6 bc	12.1 bc 11.3 c 12.9 a 11.8 bc 12.1 bc 12.1 bc 12.0 bc 12.0 bc 12.0 bc 12.4 ab

Table 159. Pima test: Combined seed data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-43	24.7 a	3.40 bcd	0.81 bcd	3.64 abcd	11.2 d
P-45	22.9 cd	3.26 d	.88 ab	3.51 bcd	11.2 d
P-34	22.6 def	3.36 bcd	.70 ef	2.40 e	12.1 a
P-48	21.7 g	3.40 bc	•65 f	2.90 cde	11.7 bc
P-42	23.0 bcd	3.27 d	.73 def	4.52 a	11.2 d
Pima S-5	23.5 b	3.42 bc	.76 cde	2.74 de	11.8 ab
P-47	22.5 def	3.41 bc	.80 bcd	3.52 bcd	11.7 bc
P-44	22.3 ef	3.49 ab	.91 a	4.11 ab	11.3 cd
P-46	22.7 cdef	3.33 cd	.76 cde	2.86 cde	12.1 a
E-16	23.2 bc	3.50 ab	•92 a	3.00 cde	11.5 bcd
E-15	22.8 cde	3.57 a	.87 ab	2.78 de	11.5 bcd
P-49	22.2 f	3.45 abc	.80 bcd	3.70 abcd	11.4 cd
E-14	22.7 cdef	3.49 ab	.84 abc	3.76 abc	11.4 cd
P-50	22.8 cde	3.56 a	.77 cde	3.02 cde	11.7 bc
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm²)	(g/cm <sup>3</sup> )		seed index
P-43	121.7 ab	128.9 ab	1.051 abc	1.0 e	12.8 a
P-45	109.6 e	120.1 e	1.022 fg	1.5 de	11.2 d
1 13 0000000000000000000000000000000000	10000				
P-34	123.3 a		•		
	123.3 a 123.4 a	130.0 a	1.038 cde	2.6 bcd	12.7 a
P-48	123.4 a	130.0 a 130.0 a	1.038 cde 1.012 g	2.6 bcd 4.8 a	12.7 a 12.4 abc
P-42	123.4 a 114.4 d	130.0 a 130.0 a 123.6 d	1.038 cde 1.012 g 1.020 fg	2.6 bcd 4.8 a 3.4 b	12.7 a 12.4 abc 11.6 d
P-48	123.4 a 114.4 d 119.2 abc	130.0 a 130.0 a 123.6 d 127.0 abc	1.038 cde 1.012 g 1.020 fg 1.031 ef	2.6 bcd 4.8 a 3.4 b 3.4 b	12.7 a 12.4 abc 11.6 d 12.3 abc
P-48	123.4 a 114.4 d 119.2 abc 118.3 bcd	130.0 a 130.0 a 123.6 d 127.0 abc 126.4 bcd	1.038 cde 1.012 g 1.020 fg 1.031 ef 1.047 cd	2.6 bcd 4.8 a 3.4 b 3.4 b 2.0 cde	12.7 a 12.4 abc 11.6 d 12.3 abc 12.4 abc
P-48	123.4 a 114.4 d 119.2 abc 118.3 bcd 109.6 e	130.0 a 130.0 a 123.6 d 127.0 abc	1.038 cde 1.012 g 1.020 fg 1.031 ef	2.6 bcd 4.8 a 3.4 b 3.4 b 2.0 cde 2.9 bc	12.7 a 12.4 abc 11.6 d 12.3 abc
P-48	123.4 a 114.4 d 119.2 abc 118.3 bcd 109.6 e 121.9 ab	130.0 a 130.0 a 123.6 d 127.0 abc 126.4 bcd 120.1 e 126.6 bcd	1.038 cde 1.012 g 1.020 fg 1.031 ef 1.047 cd 1.053 abc 1.021 fg	2.6 bcd 4.8 a 3.4 b 3.4 b 2.0 cde 2.9 bc 3.3 b	12.7 a 12.4 abc 11.6 d 12.3 abc 12.4 abc 11.4 d
P-48	123.4 a 114.4 d 119.2 abc 118.3 bcd 109.6 e 121.9 ab 115.4 cd	130.0 a 130.0 a 123.6 d 127.0 abc 126.4 bcd 120.1 e 126.6 bcd 124.2 cd	1.038 cde 1.012 g 1.020 fg 1.031 ef 1.047 cd 1.053 abc 1.021 fg 1.050 abc	2.6 bcd 4.8 a 3.4 b 3.4 b 2.0 cde 2.9 bc 3.3 b 1.9 cde	12.7 a 12.4 abc 11.6 d 12.3 abc 12.4 abc 11.4 d 12.4 abc 12.1 c
P-48	123.4 a 114.4 d 119.2 abc 118.3 bcd 109.6 e 121.9 ab 115.4 cd 114.7 d	130.0 a 130.0 a 123.6 d 127.0 abc 126.4 bcd 120.1 e 126.6 bcd 124.2 cd	1.038 cde 1.012 g 1.020 fg 1.031 ef 1.047 cd 1.053 abc 1.021 fg 1.050 abc 1.064 a	2.6 bcd 4.8 a 3.4 b 3.4 b 2.0 cde 2.9 bc 3.3 b 1.9 cde 1.8 cde	12.7 a 12.4 abc 11.6 d 12.3 abc 12.4 abc 11.4 d 12.4 abc 12.1 c 12.2 bc
P-48	123.4 a 114.4 d 119.2 abc 118.3 bcd 109.6 e 121.9 ab 115.4 cd	130.0 a 130.0 a 123.6 d 127.0 abc 126.4 bcd 120.1 e 126.6 bcd 124.2 cd 124.2 cd 129.7 ab	1.038 cde 1.012 g 1.020 fg 1.031 ef 1.047 cd 1.053 abc 1.021 fg 1.050 abc	2.6 bcd 4.8 a 3.4 b 3.4 b 2.0 cde 2.9 bc 3.3 b 1.9 cde 1.8 cde	12.7 a 12.4 abc 11.6 d 12.3 abc 12.4 abc 11.4 d 12.4 abc 12.1 c

Table 160. Pima test: Combined yield, boll and yarn tenacity data for El Paso and Fabens, Tex., and Safford, Ariz. (Curtis and Layton farms), by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1004 a	3.40 bcd	40.7 a	12.9 a	203 ab
P-47	988 ab	3.45 abc	37.6 d	12.9 def	205 ab
P-45	986 ab	3.16 d	37.7 d	11.2 g	200 a 207 a
P-49	984 ab	3.71 a	37.6 d	12.5 bcd	187 ef
E-16	957 abc	3.64 ab	37.6 d	12.0 ef	199 bc
P-50	943 bcd	3.69 a	36.1 g	12.3 cde	192 de
P-44	940 bcd	3.24 cd	37.1 ef	11.5 g	195 cd
E-15	929 cd	3.66 ab	37.6 d	12.3 cdef	196 cd
E-14	916 cd	3.64 ab	36.8 f	12.7 ab	186 f
Pima S-5	915 cd	3.66 ab	39.2 c	11.9 f	194 cd
P-48	903 cd	3.43 abc	39.8 b	12.6 abc	203 ab
P-43	891 de	3.51 abc	37.4 de	12.7 ab	201 abc
P-46	850 ef	3.25 cd	36.1 g	12.2 cdef	201 abc
P-42	829 f	3.45 abc	39.3 c	11.5 g	199 bc

Table 161. Pima test: Combined fiber data for El Paso and Fabens, Tex., and Safford, Ariz. (Layton and Curtis farms), by cotton variety

Variety	Digital F	ibrograph		Stelometer	
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
2–34	1.38 f	0.68 abc	288 cde	7.4 abcd	4.75 ab
2–47	1.40 def	.70 ab	304 a	7.0 d	4.81 a
2–45	1.43 ab	.70 ab	300 ab	7.2 bcd	4.48 cd
° <b>-</b> 49	1.42 bcde	.69 abc	274 gh	7.8 a	4.50 cd
7–16	1.42 bcde	.69 abc	292 bc	7.0 d	4.04 f
<b>2–</b> 50	1.41 bcde	.70 ab	280 defg	7.7 ab	4.21 ef
-44	1.40 def	•67 bc	267 h	7.0 d	4.30 de
<b>-</b> 15	1.40 cde	•68 abc	276 efgh	7.3 abcd	4.18 ef
-14	1.42 bcd	.69 abc	275 fgh	7.3 abcd	4.52 cd
ima S-5	1.39 ef	.68 abc	282 cdefg	7.5 abcd	4.34 cde
-48	1.42 bcde	.71 a	289 bcd	7.0 d	4.18 ef
-43	1.40 def	•69 abc	288 cde	7.5 abcd	4.56 bc
-46	1.43 bc	•70 ab	287 cdef	7.1 cd	4.44 cd
-42	1.46 a	.71 a	275 fgh	7.6 abc	4.02 f
		h Volume Instru			rimeter
	UHM	Uniformity		$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		<i>b</i> value
9-34	1.37 ab	87.4 a	40.8 abc	62.6 b	13.2 a
-47	1.38 ab	86.5 abc	41.0 abc	65.6 ab	12.3 b
<b>-</b> 45	1.36 abc	85.2 abc	42.9 a	65.8 ab	12.3 b
-49	1.37 ab	84.6 bc	39.6 abcd	64.4 ab	12.5 ab
<b>-</b> 16	1.21 c	85.0 abc	41.6 ab	66.2 a	12.5 ab
	1.38 ab	86.5 abc	41.9 ab		12.0 ab
-44	1.40 ab	84.2 c		64.6 ab	12.5 ab
<b>-</b> 15		85.2 abc	37.2 cd		11.9 b
<b>-</b> 14	1.26 abc			64.8 ab	
		84.5 c	42.0 ab		12.6 ab
ima S-5		85.4 abc	36.2 d	65.5 ab	12.2 b
10	1.42 a	87.2 ab	37.9 bcd		12.0 b
		0//		to be 11 to be	1 1 / h
2–48	1.32 abc		36.5 d		12.4 b
	1.32 abc		36.5 d 37.0 cd 40.9 abc	66.3 a	12.4 b 12.6 ab 12.6 ab

Table 162. Pima test: Combined seed data for El Paso and Fabens, Tex., and Safford, Ariz. (Curtis and Layton farms), by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
201	01 (	2 51 -1	0.71 .6	0.0.	12 (
P-34	21.6 e	3.51 ab	0.71 ef .79 cde	0.8 e	12.6 a
P-47	22.3 cd 21.8 de	3.38 cd	•79 cde	1.4 bcd	12.0 b
P-45		3.38 cd	•95 abc	1.8 abc	11.5 cd
P-49	22.0 cde	3.43 abcd		1.7 abc 1.9 bc	11.8 bc 12.0 b
E-16	23.1 a	3.54 a	1.02 a		
P-50	23.1 a	3.41 bcd	•85 bcd	2.2 a	11.9 b
P-44	21.8 cde	3.49 abc	•94 ab	2.2 a	11.3 de
E-15	23.1 a	3.47 abcd	•98 ab	1.4 bcd	11.9 b
E-14	23.0 ab	3.42 abcd	•96 ab	2.3 a	11.8 bc
Pima S-5	23.1 a	3.48 abc	.85 bcd	1.0 de	11.9 b
P-48	20.9 f	3.44 abcd	.66 f	1.3 bcde	11.9 b
P-43	23.5 a	3.41 bcd	•84 bcd	2.2 a	11.1 e
P-46	22.4 bc	3.34 d	.86 bcd	1.1 cde	11.9 ь
P-42	22.2 cde	3.39 bcd	.76 def	1.9 ab	12.0 ь
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm²)	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
P-34	137.5 a	139.8 a	0.943 abcde	3.8 bcd	12.9 a
P-47	129.0 bc	134.0 bc	•945 abcd	2.6 bcd	12.2 de
P-45	123.2 de	129.9 de	.912 f	1.9 cd	11.2 f
P-49	136.2 a	138.7 a	•943 abcde	2.1 cd	12.5 bcd
E-16	126.8 cd	132.4 cd	•949 ab	2.3 bcd	12.1 de
P-50	130.0 bc	134.7 bc	•954 a	2.6 bcd	12.4 cde
P-44	119.7 e	127.4 e	•948 abc	4.2 bc	11.3 f
E-15	129.5 bc	134.3 bc	•955 a	1.8 cd	12.4 cde
E-14	133.4 ab	137.0 ab	•955 a	1.5 d	12.4 cde
Pima S-5	130.1 bc	134.7 bc	•925 bcdef		12.7 abc
P-48	138.6 a	140.5 a	•917 ef	6.8 a	12.7 abc
P-43	136.4 a		•943 abcde	2.3 bcd	12.7 abc
P-46	134.2 ab	137.5 ab	•922 cdef	2.7 bcd	
I 4U	134.2 ab	137.3 ab		Z • / DCa	12.4 cde
P-42	126.0 cd	131.8 cd	.918 def	4.6 b	11.5 f

Table 163. Pima test: Yield, boll and yarn tenacity data for Wenden, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mW tex)
E-16	1435 a	3.41	35.8	12.4	208
E-15	1365 ab	3.46	35.9	12.3	210
P-43	1304 abc	3.80	36.6	13.0	203
Pima S-5	1302 abc	3.59	37 •8	12.3	200
P-48	1206 abcd	3.34	37.4	12.3	214
P-45	1194 abcd	2.87	35.1	11.4	218
P-49	1187 abcd	3.36	34.4	12.6	206
E-14	1162 bcd	3.22	34 • 6	12.7	·198
P-46	1138 bcd	2.96	34.1	12.2	212
P-47	1087 cd	3.45	35.3	12.5	227
P-34	1042 cd	3.32	37.8	12.9	206
P-42	1011 d	3.39	37.6	11.9	206
P-44	999 d	2.92	35.0	11.8	206
P-50	988 d	3.18	33.2	12.8	213

Table 164. Pima test: Fiber data for Wenden, Ariz.

ariety	Digital F	ibrograph	Stelo	meter	Micronain
·	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
-16	1.44	0.69	290	6.2	4.00
Z <b>-</b> 15	1.43	•71	292	6.6	4.05
9-43	1.42	•70	286	7.0	4.40
ima S-5	1.40	•68	288	7.5	4.30
-48	1.42	.71	288	6.6	3.85
<b>-</b> 45	1.46	•72	295	6.4	4.35
-49	1.42	.71	274	6.8	4.25
-14	1.44	•70	290	6.8	4.25
<b>-</b> 46	1.42	•70	297	6.6	4.05
-47	1.41	•70	304	6.8	4.60
-34	1.40	•68	288	7.1	4.40
-42	1.44	•72	298	7.6	4.35
-44	1.42	•69	288	5.8	4.25
<b>-</b> 50	1.44	•70	282	7.2	4.10
-,0	1 • 44	• 70	202	7 • 2	4.10
	Hig	h Volume Instru	ment	Color	rimeter
•	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)		b value
-16	1.44	86.5	37.5	67.2	12.8
	1.44	86.5 87.0	37.5 37.5	67.2 69.0	12.8 11.9
-15	1.44	87.0	37.5	69.0	11.9
-15 · · · · · · · · · · · · · · · · · · ·	1.44 1.40	87.0 85.0	37 • 5 44 • 0	69.0 63.0	11.9 12.1
-15	1.44 1.40 1.44	87.0 85.0 87.0	37.5 44.0 37.0	69.0 63.0 66.2	11.9 12.1 12.7
-15	1.44 1.40 1.44 1.40	87.0 85.0 87.0 86.0	37.5 44.0 37.0 34.0	69.0 63.0 66.2 71.5	11.9 12.1 12.7 12.1
-15	1.44 1.40 1.44 1.40 1.30	87.0 85.0 87.0 86.0 86.5	37.5 44.0 37.0 34.0 36.0	69.0 63.0 66.2 71.5 63.8	11.9 12.1 12.7 12.1 11.5
-15	1.44 1.40 1.44 1.40 1.30 1.16	87.0 85.0 87.0 86.0 86.5 82.5	37.5 44.0 37.0 34.0 36.0 38.5	69.0 63.0 66.2 71.5 63.8 65.2	11.9 12.1 12.7 12.1 11.5 11.8
-15	1.44 1.40 1.44 1.40 1.30 1.16 1.40	87.0 85.0 87.0 86.0 86.5 82.5	37.5 44.0 37.0 34.0 36.0 38.5 41.0	69.0 63.0 66.2 71.5 63.8 65.2 64.5	11.9 12.1 12.7 12.1 11.5 11.8
-15	1.44 1.40 1.44 1.40 1.30 1.16 1.40	87.0 85.0 87.0 86.0 86.5 82.5 85.0	37.5 44.0 37.0 34.0 36.0 38.5 41.0	69.0 63.0 66.2 71.5 63.8 65.2 64.5	11.9 12.1 12.7 12.1 11.5 11.8 11.8
-15	1.44 1.40 1.44 1.40 1.30 1.16 1.40 1.45 1.38	87.0 85.0 87.0 86.0 86.5 82.5 85.0 84.5	37.5 44.0 37.0 34.0 36.0 38.5 41.0 35.5 40.0	69.0 63.0 66.2 71.5 63.8 65.2 64.5 62.5	11.9 12.1 12.7 12.1 11.5 11.8 11.8 12.3 12.4
-43	1.44 1.40 1.44 1.40 1.30 1.16 1.40 1.45 1.38 1.40	87.0 85.0 87.0 86.0 86.5 82.5 85.0 84.5 85.5	37.5 44.0 37.0 34.0 36.0 38.5 41.0 35.5 40.0 38.0	69.0 63.0 66.2 71.5 63.8 65.2 64.5 62.5 66.0 62.2	11.9 12.1 12.7 12.1 11.5 11.8 11.8 12.3 12.4 12.5
-15	1.44 1.40 1.44 1.40 1.30 1.16 1.40 1.45 1.38 1.40 1.24	87.0 85.0 87.0 86.0 86.5 82.5 85.0 84.5 85.5	37.5 44.0 37.0 34.0 36.0 38.5 41.0 35.5 40.0 38.0 43.0	69.0 63.0 66.2 71.5 63.8 65.2 64.5 62.5 66.0 62.2 68.5	11.9 12.1 12.7 12.1 11.5 11.8 11.8 12.3 12.4 12.5 12.3
-15	1.44 1.40 1.44 1.40 1.30 1.16 1.40 1.45 1.38 1.40	87.0 85.0 87.0 86.0 86.5 82.5 85.0 84.5 85.5	37.5 44.0 37.0 34.0 36.0 38.5 41.0 35.5 40.0 38.0	69.0 63.0 66.2 71.5 63.8 65.2 64.5 62.5 66.0 62.2	11.9 12.1 12.7 12.1 11.5 11.8 11.8 12.3 12.4 12.5

Table 165. Pima test: Seed data for Wenden, Ariz.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol	Linters (percent)	Seed grade
			(percent)		
	<del></del>				
E-16	23.8	3.44	1.12	2.64	11.5
E-15	23.0	3.55	•98	2.24	11.0
P-43	24.7	3.44	•86	2.69	11.0
Pima S-5	23.0	3.46	.82	2.98	11.0
P-48	20.9	3.44	•68	3.10	12.0
P-45	21.9	3.36	•93	3.90	11.0
P-49	22.2	3.36	.77	3.22	11.5
E-14	22.4	3.56	•93	3.96	11.0
P-46	22.4	3.34	•82	2.60	12.0
P-47	21.9	3.54	•85	3.02	12.0
P-34	21.7	3.53	•74	2.80	11.5
P-42	22.0	3.48	.76	4.46	11.0
P-44	21.4	3.58	•90	4.16	11.5
P-50	22.9	3.54	•81	2.83	11.5
	0 1	C 1	Seed	Floaters	Acid-
	Seed	Seed	seea	rioaters	ACIU-
	volume	surface	density	(percent)	delinted-
	volume	surface	density		delinted-
E-16	volume	surface	density		delinted-
E-16 E-15	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
E-15	volume (mm <sup>3</sup> ) 	surface area (mm <sup>2</sup> ) 126.0 126.8	density (g/cm <sup>3</sup> ) 1.037 1.040	(percent)  0.0 .2	delinted- seed index 12.2 12.4
E-15	volume (mm <sup>3</sup> ) 117.6 118.8 122.1	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038	(percent)  0.0 .2 1.8	delinted- seed index 12.2 12.4 12.7
E-15	volume (mm <sup>3</sup> ) 117.6 118.8 122.1 119.6	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2 127.4	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013	0.0 .2 1.8 5.0	delinted- seed index 12.2 12.4 12.7 12.2
E-15	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2 127.4 130.4	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996	0.0 .2 1.8 5.0 6.2	delinted- seed index 12.2 12.4 12.7 12.2 12.3
E-15	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0 124.3	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2 127.4 130.4 120.5 130.7	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994	0.0 .2 1.8 5.0 6.2 2.8	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9 12.5
E-15	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2 127.4 130.4 120.5	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994 1.003	0.0 .2 1.8 5.0 6.2 2.8 1.5	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9
E-15 P-43 Pima S-5 P-48 P-45 P-49 E-14	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0 124.3 118.9	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2 127.4 130.4 120.5 130.7 126.9	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994 1.003 1.029	0.0 .2 1.8 5.0 6.2 2.8 1.5	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9 12.5 12.2
E-15 P-43 Pima S-5 P-48 P-45 P-49 E-14 P-46	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0 124.3 118.9 123.7 123.4	surface area (mm <sup>2</sup> ) 126.0 126.8 129.2 127.4 130.4 120.5 130.7 126.9 124.2 130.0	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994 1.003 1.029 .995 1.044	0.0 .2 1.8 5.0 6.2 2.8 1.5 1.5	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9 12.5 12.2 12.3
E-15	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0 124.3 118.9 123.7 123.4 121.2	surface area (mm <sup>2</sup> )  126.0 126.8 129.2 127.4 130.4 120.5 130.7 126.9 124.2 130.0 128.4	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994 1.003 1.029 .995 1.044 1.027	0.0 .2 1.8 5.0 6.2 2.8 1.5 1.5	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9 12.5 12.2 12.3 13.0
E-15 P-43 Pima S-5 P-48 P-45 P-49 E-14 P-46 P-47 P-34 P-42	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0 124.3 118.9 123.7 123.4 121.2 111.0	surface area (mm <sup>2</sup> )  126.0 126.8 129.2 127.4 130.4 120.5 130.7 126.9 124.2 130.0 128.4 121.2	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994 1.003 1.029 .995 1.044 1.027 1.005	(percent)  0.0 .2 1.8 5.0 6.2 2.8 1.5 1.5 4.2 1.5 2.2 4.5	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9 12.5 12.2 12.3 13.0 12.4 11.1
E-15 P-43 Pima S-5 P-48 P-45 P-49 E-14 P-46 P-47 P-34	volume (mm <sup>3</sup> )  117.6 118.8 122.1 119.6 123.8 110.0 124.3 118.9 123.7 123.4 121.2	surface area (mm <sup>2</sup> )  126.0 126.8 129.2 127.4 130.4 120.5 130.7 126.9 124.2 130.0 128.4	density (g/cm <sup>3</sup> ) 1.037 1.040 1.038 1.013 .996 .994 1.003 1.029 .995 1.044 1.027	0.0 .2 1.8 5.0 6.2 2.8 1.5 1.5 4.2 1.5	delinted- seed index  12.2 12.4 12.7 12.2 12.3 10.9 12.5 12.2 12.3 13.0 12.4

Table 166. Pima test: Yield, boll and yarn tenacity data for Phoenix, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mW tex)
P-43	1345 a	3.63	34.4	12.6	206
	1314 ab	2.99	35.7	11.3	208
P-42	1314 ab	3.39	36.4	12.0	217
P-48	1313 ab	2.83	36.3	12.6	217
P-34	1190 c	2.61	33.9	10.9	223
P-45			34.9		
Pima S-5	1166 c	3.56	T 1 1	12.3	198
P-46	1058 d	2.91	33.0	12.3	212
P-47	984 de	3.49	33.1	12.6	220
P-44	920 ef	2.85	32.4	11.5	200
E-15	865 f	2.96	34.4	11.5	202
P-49	858 f	3.18	32.4	13.0	194
E-16	835 f	2.83	33.6	11.6	208
E-14	733 g	2.73	31.4	12.9	186
P-50	693 g	3.12	31.2	12.7	206

Table 167. Pima test: Fiber data for Phoenix, Ariz.

/ariety	Digital F:	ibrograph		meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
?-43	1.38	0.66	262	7.0	4.55
2–42	1.42	•69	259	7.0	4.45
2–48	1.40	•70	306	7.4	4.30
2–34	1.35	•65	264	6.6	4.50
2-45	1.40	.70	302	7.0	4.70
oima S-5	1.38	•68	264	7.5	4.35
9–46	1.42	•70	296	7.0	4.45
9–47	1.40	•71	290	7.5	4.75
9-44	1.37	•66	265	7.2	4.25
E-15	1.37	•68	272	7.0	4.00
-49	1.40	•68	276	7.4	4.50
E-16	1.38	• 67	295	7.2	3.80
-14	1.39	•68	262	7.1	4.25
-50	1.40	•70	268	7.5	4.50
	1.40	• / 0		, , , ,	
		h Volume Instru			rimeter
				Colo	
	High	n Volume Instru	ment		rimeter
	UHM (inches)	h Volume Instru Uniformity (percent)	Tenacity (g/tex)	$\frac{Color}{R_d}$	rimeter  Hunter's  b value
-43	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	Color R <sub>d</sub> 67.8	Hunter's b value
7–43	High UHM (inches) 1.42 1.07	Uniformity (percent) 88.5 85.5	Tenacity (g/tex)  39.5 40.5	Color R <sub>d</sub> 67.8 67.2	Hunter's b value  12.0 12.1
2–43	High UHM (inches) 1.42 1.07 1.44	Uniformity (percent)  88.5 85.5 86.0	Tenacity (g/tex) 39.5 40.5 37.5	Color Rd  67.8 67.2 67.5	Hunter's b value  12.0 12.1 11.3
-43	High UHM (inches) 1.42 1.07 1.44 1.46	Uniformity (percent) 88.5 85.5 86.0 87.5	Tenacity (g/tex) 39.5 40.5 37.5 39.5	Color Rd  67.8 67.2 67.5 62.0	Hunter's b value  12.0 12.1 11.3 13.3
2-43	High UHM (inches) 1.42 1.07 1.44 1.46 1.47	Uniformity (percent) 88.5 85.5 86.0 87.5 86.5	Tenacity (g/tex) 39.5 40.5 37.5 39.5 38.5	Color Rd  67.8 67.2 67.5 62.0 62.0	12.0 12.1 11.3 13.3 9.6
2-43	High UHM (inches) 1.42 1.07 1.44 1.46 1.47	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 86.5	Tenacity (g/tex) 39.5 40.5 37.5 39.5 39.5 40.0	Color Rd  67.8 67.2 67.5 62.0 62.0 67.2	12.0 12.1 11.3 13.3 9.6 11.9
2-43	High UHM (inches) 1.42 1.07 1.44 1.46 1.47 1.32 1.33	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 85.0 89.5	ment Tenacity (g/tex)  39.5 40.5 37.5 39.5 38.5 40.0 32.5	Color Rd  67.8 67.2 67.5 62.0 62.0 67.2 68.2	12.0 12.1 11.3 13.3 9.6 11.9
-43	High UHM (inches) 1.42 1.07 1.44 1.46 1.47 1.32 1.33 1.40	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 85.0 89.5	ment Tenacity (g/tex) 39.5 40.5 37.5 39.5 38.5 40.0 32.5 41.5	67.8 67.2 67.5 62.0 62.0 67.2 68.2 66.2	12.0 12.1 11.3 13.3 9.6 11.9 11.3
2-43	High UHM (inches) 1.42 1.07 1.44 1.46 1.47 1.32 1.33 1.40 1.40	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 85.0 89.5 89.0	Tenacity (g/tex)  39.5 40.5 37.5 39.5 40.0 32.5 41.5 36.0	Color Rd  67.8 67.2 67.5 62.0 62.0 67.2 68.2 66.2 68.0	12.0 12.1 11.3 13.3 9.6 11.9 11.3 12.1
2-43	High UHM (inches) 1.42 1.07 1.44 1.46 1.47 1.32 1.33 1.40 1.40 1.39	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 85.0 89.5 89.0 86.0 84.5	Tenacity (g/tex)  39.5 40.5 37.5 39.5 38.5 40.0 32.5 41.5 36.0 37.0	Color Rd  67.8 67.2 67.5 62.0 62.0 67.2 68.2 66.2 68.0 65.2	12.0 12.1 11.3 13.3 9.6 11.9 11.3 12.1 11.9
2-43 2-42 2-48 2-34 2-45 2-45 2-46 2-47 2-44 3-15	High UHM (inches) 1.42 1.07 1.44 1.46 1.47 1.32 1.33 1.40 1.40 1.39 1.46	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 85.0 89.5 89.0 84.5	Tenacity (g/tex)  39.5 40.5 37.5 39.5 40.0 32.5 41.5 36.0 37.0 38.5	Color Rd  67.8 67.2 67.5 62.0 62.0 67.2 68.2 66.2 68.0 65.2 65.5	12.0 12.1 11.3 13.3 9.6 11.9 11.3 12.1 11.9
P-43 P-42 P-48	High UHM (inches) 1.42 1.07 1.44 1.46 1.47 1.32 1.33 1.40 1.40 1.39	Nolume Instru Uniformity (percent) 88.5 85.5 86.0 87.5 86.5 85.0 89.5 89.0 86.0 84.5	Tenacity (g/tex)  39.5 40.5 37.5 39.5 38.5 40.0 32.5 41.5 36.0 37.0	Color Rd  67.8 67.2 67.5 62.0 62.0 67.2 68.2 66.2 68.0 65.2	12.0 12.1 11.3 13.3 9.6 11.9 11.3 12.1 11.9

Table 168. Pima test: Seed data for Phoenix, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
n /2	25.7	3.36	0.41	3.6	11.0
P-43	24.4	3.21	•45	7.7	11.0
P-42	23.2	3.42	•45	4.3	
P-48					12.0
P-34	23.4	3.54	•41	4.5	12.0
P-45	22 • 8	3.42	•50	5.4	11.0
Pima S-5	23.6	3.74	•46	3.9	11.5
P-46	22.3	3.63	•35	3.6	12.0
P-47	22.5	3.74	•42	5.1	11.0
P-44	22.0	3.81	• 47	5.5	11.0
E-15	22.0	4.02	•40	4.8	10.5
P-49	21.4	3.83	•37	5.7	10.5
E-16	22.0	4.04	•43	4.5	10.5
E-14	21.5	3.90	.33	5.8	10.5
P-50	22.2	3.88	•35	4.2	11.0
			0 1	T3 1	A . 1
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
- /2		107.5	1 05/		10 (
P-43	119.8	127.5	1.054	0.3	12.6
P-42	105.0	116.8	1.018	3.8	10.7
P-48	121.3	128.6	1.004	3.8	12.2
P-34	119.3	127.2	1.037	2.3	12.4
D / E	105.0			1 0	10.7
P-45	103.0	116.8	1.014	1.3	10.7
Pima S-5	118.4	116.8 126.6	1.014 1.027	3.3	12.2
Pima S-5					
	118.4	126.6	1.027	3.3	12.2
Pima S-5	118.4 123.0	126.6 121.5	1.027 1.013	3.3 3.3	12.2 12.5
Pima S-5	118.4 123.0 113.7	126.6 121.5 123.2	1.027 1.013 1.061	3.3 3.3 2.0	12.2 12.5 12.1
Pima S-5	118.4 123.0 113.7 105.3	126.6 121.5 123.2 117.1 127.2	1.027 1.013 1.061 1.050	3.3 3.3 2.0 5.3	12.2 12.5 12.1 11.1
Pima S-5	118.4 123.0 113.7 105.3 119.7	126.6 121.5 123.2 117.1 127.2 128.7	1.027 1.013 1.061 1.050 1.061 1.049	3.3 3.3 2.0 5.3 3.5 3.3	12.2 12.5 12.1 11.1 12.7 12.5
Pima S-5	118.4 123.0 113.7 105.3 119.7	126.6 121.5 123.2 117.1 127.2	1.027 1.013 1.061 1.050 1.061	3.3 3.3 2.0 5.3 3.5	12.2 12.5 12.1 11.1 12.7

Table 169. Pima test: Yield, boll and yarn tenacity data for Safford, Ariz. (Curtis farm)

Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
1272	2 22	27 7	11 2	210
				196
1201 ab	3.16	40.7	12.3	208
1267 ab	2.99	38.1	10.4	205
1265 ab	3.52	36 • 4	11.7	194
1218 abc	3.41	40.0	11.9	199
1211 abc	3.49	38.2	11.8	189
1208 abc	3.46	37.0	11.9	186
1182 bc	3.23	39.9	11.0	206
1181 bc	3.58	39.5	11.3	200
1169 bc	3.53	38.5	11.2	193
1120 c	3.26	38.1	11.0	190
1119 c	2.98	36.3	11.4	199
1117 c	3.41	38.0	12.2	208
	(1b/acre)  1323 a 1281 ab 1273 ab 1267 ab 1265 ab 1218 abc 1211 abc 1208 abc 1182 bc 1181 bc 1169 bc 1120 c 1119 c	(1b/acre) (g/boll)  1323 a	(1b/acre)     (g/boll)     percent       1323 a     3.23     37.7       1281 ab     3.11     37.4       1273 ab     3.16     40.7       1267 ab     2.99     38.1       1265 ab     3.52     36.4       1218 abc     3.41     40.0       1211 abc     3.49     38.2       1208 abc     3.46     37.0       1182 bc     3.23     39.9       1181 bc     3.58     39.5       1169 bc     3.53     38.5       1120 c     3.26     38.1       1119 c     2.98     36.3	(1b/acre)     (g/boll)     percent     index       1323 a     3.23     37.7     11.2       1281 ab     3.11     37.4     10.9       1273 ab     3.16     40.7     12.3       1267 ab     2.99     38.1     10.4       1265 ab     3.52     36.4     11.7       1218 abc     3.41     40.0     11.9       1211 abc     3.49     38.2     11.8       1208 abc     3.46     37.0     11.9       1182 bc     3.23     39.9     11.0       1181 bc     3.58     39.5     11.3       1169 bc     3.53     38.5     11.2       1120 c     3.26     38.1     11.0       1119 c     2.98     36.3     11.4

Table 170. Pima test: Fiber data for Safford, Ariz. (Curtis farm)

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
P-47	1.36	0.66	294	6.6	4.50
P-44	1.37	•65	266	6.6	4.20
P-34	1.37	•68	286	7.2	4.75
P-45	1.40	•67	294	6.7	4.35
P-50	1.42	•69	270	7.6	4.30
P-48	1.38	•70	291	6.5	4.05
P-49	1.37	•66	273	7.9	4.55
E-14	1.39	•67	274	7.0	4.40
P-42	1.43	•69	274	7.3	4.00
Pima S-5	1.37	•64	267	7.0	4.45
E-15	1.34	•64	254	7.6	4.00
E-16	1.38	•66	290	6.5	3.90
P-46	1.38	•66	284	7.0	4.45
P-43	1.38	•68	288	7.4	4.55
	1.30	• 00	200	/ • <del>''</del>	4.33
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(ġ/tex)		b value
P-47	1.35	83.5	44.0	65.8	12.6
P-44	1.35	82.5	35.0	63.5	12.6
P-34	1.44	88.0	40.0	63.2	13.6
P-45	1.34	84.5	40.5	65.5	12.0
P-50	1.44	85.5	40.0	67.2	13.0
P-48	1.44	86.5	37.5	67.2	12.5
P-49	1.40	87.0	43.5	66.8	
E-14	1.30		41.5	64.8	12.3
		83.5			13.0
P-42	1.44	86.0	41.0	65.2	12.5
Pima S-5 E-15	1.41	83.5	32.0	66.2	11.7
d — 1 1 1	1.38	84.0	36.0	67.2	13.0
	1 00			hh 8	12.8
E-16	1.29	82.5	42.5	66.8	
E-16	1.29 1.32 1.33	82.5 85.5 86.5	39.0 33.0	65.8 63.2	12.6 12.6

Table 171. Pima test: Seed data for Safford, Ariz. (Curtis farm)

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
- /7	00.0	0.10	0.00		10.0
P-47	22.9	3.19	0.98	2.0	12.0
P-44	22.6	3.33	1.04	2.2	11.0
P-34	21.2	3.36	•69	1.3	12.0
P-45	21.9	3.21	•93	2.1	11.0
P-50	23.0	3.36	•85	1.6	11.5
P-48	21.4	3.38	•70	•4	11.5
P-49	21.5	3.49	•87	1.4	11.5
E-14	22.9	3.39	•94	1.4	11.5
P-42	23.1	3.23	•75	1.1	12.0
Pima S-5	23.7	3.50	•80	1.5	11.5
E-15	22.9	3.49	1.03	1.6	11.5
E-16	22.4	3.63	1.00	1.7	12.0
P-46	22.7	3.24	•85	•9	11.5
P-43	23.9	3.42	•80	1.7	11.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
P-47	119.0	127.0	0.963	2.3	11.5
P-44	107.8	118.9	1.001	3.0	10.8
P-34	131.3	135.6	•966	3.5	12.5
P-45	112.3	122.2	•935	1.3	10.5
P-50	126.1	132.0	•953	3.0	12.0
P-48	128.9	133.9	•948	7.8	12.0
P-49	120.8	128.2	•972	3.3	11.7
E-14	128.4	133.6	•972	•5	12.2
P-42			•934	3.0	11.1
	117.0	125.5	•947	2.3	11.7
Pima S-5	121.0	128.4		2.8	
E-15	121.7 117.6	128.9	•953		11.6
71 1 (	11/6	126.0	•950	2.8	10.9
E-16	122.1	129.2	•960	2.0	11.7

Table 172. Pima test: Yield, boll and yarn tenacity data for Salome, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
2 / 5	1050	2.02	27.0	10.7	017
P-45	1253 a	2.93	37.0	10.7	217
P-34	1175 ab	3.23	39.7	12.5	208
Pima S-5 ·····	1167 ab	3.52	38.3	11.5	206
E-16	1139 abc	3.31	36.9	11.3	208
P-44	1134 abc	3.14	36.5	11.0	204
P-47	1121 abc	3.12	36.1	11.9	220
P-42	1087 abc	3.40	38.1	11.5	206
P-48	1066 bc	3.24	38.5	12.1	212
E-15	1045 bc	3.35	36.9	11.6	203
P-49	1039 bc	3.20	36.1	12.0	200
P-46	1037 bc	2.81	35.4	11.8	217
E-14	1033 bc	3.27	35.9	12.2	196
P-50	1011 bc	3.12	34.5	12.2	212
P-43	982 c	3.34	37.0	12.4	208

Table 173. Pima test: Fiber data for Salome, Ariz.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
P-45	1.44	0.70	318	6.2	4.30
P-34	1.42	.73	298	6.8	4.70
Pima S-5	1.40	.70	292	6.8	4.40
E-16	1.42	•68	296	6.3	4.00
2-44	1.38	•69	280	6.8	4.25
9–47	1.41	.70	319	6.6	4.65
>-42	1.44	.71	294	6.7	4.40
-48	1.46	•74	300	6.6	4.05
; <del>-</del> 15	1.38	•68	292	6.5	4.20
2–49	1.44	.70	280	6.5	4.50
-46	1.43	.70	302	6.5	4.35
-14	1.44	.67	282	6.7	4.40
<b>-</b> 50	1.45	.72	294	6.7	4.20
-43	1.43	.72	298	7.0	4.45
73	1.45	• 1 4	230	7.0	T•47
	Hig	h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$\overline{R_d}$	Hunter's
	(inches)	(percent)	(g/tex)	<b>u</b>	b value
?-45	1.33	84.0	39.5	65.2	12.5
2–34	1.38	86.0	43.5	64.5	12.9
ima S-5	1.50	83.5	42.0	65.5	12.9
-16 ······	1.46	86.5	39.5	67.2	12.9
<u>-44</u>	1.44	84.0	39.5	68.0	12.3
<b>-47</b>	1.36	87.5	37.5	68.2	12.6
<del>-4</del> 2	1.48	86.0	37.0	61.2	10.9
<b>-</b> 48			37.5	66.5	
<del>-48</del>	1.43	85.0			12.3
	1.43	85.5	41.5	64.2	11.3
	1 / 2		43.0	66.2	13.0
2–49	1.42	85.0	_	(0, 0	10.0
9–49 · · · · · · · · · · · · · · · · · · ·	1.35	85.5	40.0	68.8	12.8
2–49	1.35 1.25	85.5 84.0	40.0 40.5	65.8	12.3
2–49	1.35	85.5	40.0		

Table 174. Pima test: 'Seed data for Salome, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-45	23.2	3.04	0.89	4.1	11.5
P-34	22.7	3.45	.71	1.7	12.0
Pima S-5	23.4	3.16	•69	3.7	12.0
E-16	23.8	3.20	•90	3.8	11.5
P-44	22.9	3.27	•99	4.3	11.0
P-47	23.1	3.12	•74	4.4	11.0
P-42	23.9	3.11	•65	3.5	11.0
P-48	21.0	3.32	•65	3.1	11.5
E-15	22.8	3.45	.88	3.2	12.0
P-49	22.0	3.45	.74	4.6	11.0
	23.4	3.05	.87	3.7	12.0
P-46					
E-14	23.1	3.30	•93	4.5	11.5
?=50	22.9	3.35	.78	3.1	11.5
2–43	23.8	3.45	. 73	4.3	11.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
P-45	102.9 122.1	115.3 129.2	1.027 1.043	0.8	10.6 12.7
	108.9	119.7	1.040	2.3	
Pima S-5					11.3
<b>5–16</b>	104.1	116.1	1.047	1.5	10.9
2-44	100.9	113.7	1.072	1.3	10.8
2–47	109.5	120.1	1.047	2.0	11.5
2–42	110.9	121.1	1.011	1.3	11.2
2–48	117.4	125.9	1.012	4.3	11.9
<u>5</u> –15	105.7	117.3	1.068	2.3	11.3
2–49	114.2	123.6	1.021	1.3	11.7
2–46	117.2	125.7	1.029	2.5	12.1
	118.3	123.6	1.028	1.0 .	12.2
	110.0				
E-14	113.5	123.0	1.059	1.8	12.1

Table 175. Pima test: Yield, boll and yarn tenacity data for Marana, Ariz. (Station)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	1218 a	3.65	39.6	12.4	213
P-43	1181 a	3.63	36.7	12.6	205
P-45	1157 ab	3.17	36.9	10.9	216
P-42	1151 ab	3.70	37.7	11.5	204
P-44	1144 ab	3.21	36.6	11.2	202
P-48	1120 ab	3.88	38.3	12.7	216
P-47	1120 ab	3.87	36.4	12.2	212
E-16	1040 bc	3.45	37.0	11.8	216
Pima S-5	1039 bc	4.21	38.5	12.0	200
E-15	1025 bc	3.48	37.4	11.7	216
P-46	980 c	3.33	35.3	12.1	208
P-49	944 cd	3.80	36.3	12.6	202
E-14	849 de	3.61	36.2	12.5	198
P-50	785 e	3.75	35.6	12.5	204

Table 176. Pima test: Fiber data for Marana, Ariz.

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	El (percent)	reading
P-34	1.41	0.72	292	6.2	4.65
P-43	1.44	.74	310	6.6	4.45
P-45	1.43	•72	29 5	7.3	4.70
2-42	1.46	•73	279	6.9	4.35
2–44	1.40	•68	255	6.4	4.45
2-48	1.42	.72	296	6.8	4.25
2–47	1.46	.74	308	6.4	4.90
E-16	1.42	•72	312	6.6	4.15
Pima S-5	1.41	.70	291	6.6	4.50
E-15	1.42	•71	296	6.6	4.30
9-46	1.45	.71	282	6.6	4.40
9-49	1.42	•72	292	7.4	4.80
-14	1.44	.72	288	7.2	4.45
- 50	1.46	•75	300	7.2	4.20
2- 30	1.40	• / 3	300	7 • 2	1.020
,- 50		n Volume Instru			rimeter
_ 50					
- 50	High	n Volume Instru	ment	Color	cimeter
	High UHM (inches)	Volume Instru Uniformity (percent)	Tenacity (g/tex)	Color R <sub>d</sub>	Hunter's  b value
-34	High UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	Color R <sub>d</sub> 61.5	Hunter's b value
9–34 9–43	High UHM (inches) 1.46 1.24	Volume Instru Uniformity (percent) 88.5 86.5	Tenacity (g/tex)  39.0 35.5	Color R <sub>d</sub> 61.5 65.5	Hunter's b value  13.4 12.0
7–34	High UHM (inches) 1.46 1.24 1.44	Uniformity (percent)  88.5 86.5 86.5	Tenacity (g/tex) 39.0 35.5 36.0	Color R <sub>d</sub> 61.5 65.5 66.8	Hunter's b value  13.4 12.0 11.4
2–34	High UHM (inches) 1.46 1.24 1.44	Volume Instru Uniformity (percent) 88.5 86.5 86.5 86.5	Tenacity (g/tex) 39.0 35.5 36.0 32.0	Color R <sub>d</sub> 61.5 65.5 66.8 63.0	13.4 12.0 11.4 12.8
2-34	High UHM (inches) 1.46 1.24 1.44 1.24 1.38	Volume Instru Uniformity (percent) 88.5 86.5 86.5 86.0 84.5	Tenacity (g/tex) 39.0 35.5 36.0 32.0 41.5	61.5 65.5 66.8 63.0 64.2	Hunter's b value  13.4 12.0 11.4 12.8 11.9
7–34	High UHM (inches) 1.46 1.24 1.44 1.24 1.38 1.26	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.0 84.5 90.5	Tenacity (g/tex) 39.0 35.5 36.0 32.0 41.5 34.0	61.5 65.5 66.8 63.0 64.2 61.0	13.4 12.0 11.4 12.8 11.9
7–34	High UHM (inches) 1.46 1.24 1.44 1.24 1.38 1.26 1.44	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.0 84.5 90.5 88.0	Tenacity (g/tex) 39.0 35.5 36.0 32.0 41.5 34.0 38.5	Color R <sub>d</sub> 61.5 65.5 66.8 63.0 64.2 61.0 57.2	13.4 12.0 11.4 12.8 11.9 11.4 11.3
7-34 -43 -45 -42 -44 -48 -47 -16	High UHM (inches) 1.46 1.24 1.44 1.38 1.26 1.44 1.32	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.0 84.5 90.5 88.0 84.0	Tenacity (g/tex) 39.0 35.5 36.0 32.0 41.5 34.0 38.5 39.5	61.5 65.5 66.8 63.0 64.2 61.0 57.2 65.0	13.4 12.0 11.4 12.8 11.9 11.4 11.3 12.3
2-34 2-43 2-45 2-42 2-44 2-48 2-47 3-16 2-16 2-16	High UHM (inches) 1.46 1.24 1.44 1.24 1.38 1.26 1.44 1.32 1.42	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.0 84.5 90.5 88.0 84.0	Tenacity (g/tex)  39.0 35.5 36.0 32.0 41.5 34.0 38.5 39.5 35.5	Color R <sub>d</sub> 61.5 65.5 66.8 63.0 64.2 61.0 57.2 65.0 66.0	13.4 12.0 11.4 12.8 11.9 11.4 11.3 12.3
2-34	High UHM (inches) 1.46 1.24 1.44 1.28 1.26 1.44 1.32 1.42 1.24	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.5 86.0 84.5 90.5 88.0 84.0 87.0 83.0	Tenacity (g/tex)  39.0 35.5 36.0 32.0 41.5 34.0 38.5 39.5 35.5 35.0	Color R <sub>d</sub> 61.5 65.5 66.8 63.0 64.2 61.0 57.2 65.0 66.0 60.0	Hunter's b value  13.4 12.0 11.4 12.8 11.9 11.4 11.3 12.3 11.6 11.9
2-34 2-43 2-45 2-42 2-44 2-48 2-47 3-16 2-ima S-5 3-15	High UHM (inches) 1.46 1.24 1.44 1.24 1.38 1.26 1.44 1.32 1.42 1.42 1.40	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.0 84.5 90.5 88.0 84.0 87.0 83.0 84.5	Tenacity (g/tex)  39.0 35.5 36.0 32.0 41.5 34.0 38.5 39.5 35.5 35.0 34.5	Color R <sub>d</sub> 61.5 65.5 66.8 63.0 64.2 61.0 57.2 65.0 66.0 60.0 64.0	13.4 12.0 11.4 12.8 11.9 11.4 11.3 12.3 11.6 11.9
2-34 2-43	High UHM (inches) 1.46 1.24 1.44 1.28 1.26 1.44 1.32 1.42 1.24	Nolume Instru Uniformity (percent) 88.5 86.5 86.5 86.5 86.0 84.5 90.5 88.0 84.0 87.0 83.0	Tenacity (g/tex)  39.0 35.5 36.0 32.0 41.5 34.0 38.5 39.5 35.5 35.0	Color R <sub>d</sub> 61.5 65.5 66.8 63.0 64.2 61.0 57.2 65.0 66.0 60.0	Hunter's b value  13.4 12.0 11.4 12.8 11.9 11.4 11.3 12.3 11.6 11.9

Table 177. Pima test: Seed data for Marana, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
D 2/	02 (	0.06	0.76	1 0	10.5
P-34	23.6	3.26	0.76	1.3	12.5
P-43	25.5	3.13	•97	4.5	11.0
P-45	24.0	3.04	1.00	3.2	11.5
P-42	23.7	3.07	•86	3.5	11.5
P-44	23.8	3.16	1.03	3.4	12.0
P-48	22.7	3.13	•87	2.7	11.5
P-47	23.5	3.12	1.00	3.1	12.0
E-16	23.6	3.39	1.03	2.8	12.0
Pima S-5	23.9	3.22	.86	2.1	12.0
E-15	23.6	3.27	1.04	2.7	12.0
P-46	23.6	3.12	<b>.</b> 87	2.9	12.0
P-49	23.2	3.21	1.04	2.9	12.0
E-14	23.7	3.28	1.08	3.3	12.0
P-50	24.1	3.22	.97	2.6	12.0
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
	<del></del>				
P-34	126.0	131.9	1.035	1.8	12.5
P-43	111.0	121.2	1.030	1.3	11.4
			1.030		T T 4 T
P-45	112.0	121.8	1.037	•5	11.6
P-45 P-42	112.0 118.6				
		121.8	1.037	•5	11.6
P-42	118.6	121.8 126.7	1.037 1.020	.5 2.5	11.6 11.6
P-42 P-44	118.6 108.8	121.8 126.7 119.6	1.037 1.020 1.030	.5 2.5 1.0	11.6 11.6 11.2
P-42 P-44 P-48	118.6 108.8 122.0	121.8 126.7 119.6 129.1	1.037 1.020 1.030 1.026	.5 2.5 1.0 2.3	11.6 11.6 11.2 12.5
P-42	118.6 108.8 122.0 114.5	121.8 126.7 119.6 129.1 123.8	1.037 1.020 1.030 1.026 1.047	.5 2.5 1.0 2.3 1.8	11.6 11.6 11.2 12.5 12.0
P-42 P-44 P-48 P-47 E-16	118.6 108.8 122.0 114.5 110.8	121.8 126.7 119.6 129.1 123.8 121.1	1.037 1.020 1.030 1.026 1.047 1.052	.5 2.5 1.0 2.3 1.8 1.0	11.6 11.6 11.2 12.5 12.0 11.6
P-42 P-44 P-48 P-47 E-16 Pima S-5 E-15	118.6 108.8 122.0 114.5 110.8 116.3 106.0	121.8 126.7 119.6 129.1 123.8 121.1 125.1	1.037 1.020 1.030 1.026 1.047 1.052 1.029 1.089	.5 2.5 1.0 2.3 1.8 1.0 2.3	11.6 11.6 11.2 12.5 12.0 11.6 12.0 11.5
P-42 P-44 P-48 P-47 E-16 Pima S-5 E-15 P-46	118.6 108.8 122.0 114.5 110.8 116.3 106.0 120.1	121.8 126.7 119.6 129.1 123.8 121.1 125.1 120.1	1.037 1.020 1.030 1.026 1.047 1.052 1.029 1.089 1.017	.5 2.5 1.0 2.3 1.8 1.0 2.3 1.8 3.3	11.6 11.6 11.2 12.5 12.0 11.6 12.0 11.5
P-42 P-44 P-48 P-47 E-16 Pima S-5 E-15	118.6 108.8 122.0 114.5 110.8 116.3 106.0	121.8 126.7 119.6 129.1 123.8 121.1 125.1	1.037 1.020 1.030 1.026 1.047 1.052 1.029 1.089	.5 2.5 1.0 2.3 1.8 1.0 2.3 1.8	11.6 11.6 11.2 12.5 12.0 11.6 12.0 11.5

Table 178. Pima test: Yield, boll and yarn tenacity data for Fabens, Tex.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-49	1188 a	3.98	38.1	12.4	188
P-34	1179 a	3.48	41.1	13.0	201
E-16	1157 ab	4.27	37.8	12.5	196
E-14	1118 abc	3.56	37 • 5	12.5	180
P-47	1078 abcd	3.36	37.4	12.6	203
Pima S-5	1067 abcde	3.58	39.7	11.7	192
P-45	1061 abcde	3.10	38.2	11.1	201
E-15	1046 bcde	3.55	37.1	12.8	192
P-46	1030 bcde	3.66	36.4	12.5	196
P-44	999 cde	3.40	37.5	11.7	190
P-43	987 cde	3.41	37.3	12.8	193
P-48	962 de	3.24	39.6	12.6	202
P-50	942 de	3.99	36.1	12.3	189
P-42	933 e	3.73	39.7	11.6	198

Table 179. Pima test: Fiber data for Fabens, Tex.

ariety	Digital F:	ibrograph	Stelo	meter	Micronaire
	2.5% S.L.	50% S.L.	T <sub>1</sub>	E <sub>1</sub>	reading
	(inches)	(inches)	(mN/tex)	(percent)	
-49	1.40	0.70	264	8.0	4.55
9-34	1.36	•69	289	7.6	4.70
-16	1.41	.67	288	7.5	4.15
-14	1.42	• 68	258	7.4	4.70
-47	1.40	.72	294	7.8	5.10
ima S-5	1.38	•66	284	8.2	4.10
<b>-</b> 45	1.42	•68	292	7.8	4.55
-15	1.42	•66	276	7.8	4.30
<b>-</b> 46	1.42	•72	280	7.8	4.35
-44	1.40	• 68	262	7.8	4.30
-43	1.38	•68	286	7.8	4.65
-48	1.40	•72	289	7.0	4.20
-50	1.40	•69	265	7.8	4.00
-42	1.45	• 69	268	7.9	3.65
	Hig'	n Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
4.0	1 40	92 0	25 0	62 5	12 6
	1.49	82.0	35.0	63.5	12.6
-34	1.41	88.5	37.5	64.0	13.3
-34 · · · · · · · · · · · · · · · · · · ·	1.41 1.30	88.5 86.0	37.5 41.5	64.0 64.8	13.3 12.3
-34	1.41 1.30 1.14	88.5 86.0 84.5	37.5 41.5 42.0	64.0 64.8 65.8	13.3 12.3 12.1
-34	1.41 1.30 1.14 1.45	88.5 86.0 84.5 87.5	37.5 41.5 42.0 41.0	64.0 64.8 65.8 64.8	13.3 12.3 12.1 12.1
-34	1.41 1.30 1.14 1.45 1.20	88.5 86.0 84.5 87.5 89.5	37.5 41.5 42.0 41.0 33.5	64.0 64.8 65.8 64.8 67.0	13.3 12.3 12.1 12.1 12.6
-34	1.41 1.30 1.14 1.45 1.20 1.37	88.5 86.0 84.5 87.5 89.5 85.0	37.5 41.5 42.0 41.0 33.5 41.0	64.0 64.8 65.8 64.8 67.0 64.5	13.3 12.3 12.1 12.1 12.6 12.0
-34	1.41 1.30 1.14 1.45 1.20 1.37 1.34	88.5 86.0 84.5 87.5 89.5 85.0 84.5	37.5 41.5 42.0 41.0 33.5 41.0 36.5	64.0 64.8 65.8 64.8 67.0 64.5	13.3 12.3 12.1 12.1 12.6 12.0 10.9
-34	1.41 1.30 1.14 1.45 1.20 1.37 1.34 1.42	88.5 86.0 84.5 87.5 89.5 85.0 84.5	37.5 41.5 42.0 41.0 33.5 41.0 36.5 36.5	64.0 64.8 65.8 64.8 67.0 64.5 63.2 65.2	13.3 12.3 12.1 12.1 12.6 12.0 10.9 12.7
-34	1.41 1.30 1.14 1.45 1.20 1.37 1.34 1.42	88.5 86.0 84.5 87.5 89.5 85.0 84.5 88.0	37.5 41.5 42.0 41.0 33.5 41.0 36.5 36.5	64.0 64.8 65.8 64.8 67.0 64.5 63.2 65.2 60.0	13.3 12.3 12.1 12.1 12.6 12.0 10.9 12.7 12.9
-34	1.41 1.30 1.14 1.45 1.20 1.37 1.34 1.42 1.43	88.5 86.0 84.5 87.5 89.5 85.0 84.5 88.0 85.5	37.5 41.5 42.0 41.0 33.5 41.0 36.5 36.5 40.5	64.0 64.8 65.8 64.8 67.0 64.5 63.2 65.2 60.0	13.3 12.3 12.1 12.1 12.6 12.0 10.9 12.7 12.9
-34	1.41 1.30 1.14 1.45 1.20 1.37 1.34 1.42 1.43	88.5 86.0 84.5 87.5 89.5 85.0 84.5 88.0 85.5 88.0	37.5 41.5 42.0 41.0 33.5 41.0 36.5 36.5 40.5 37.5	64.0 64.8 65.8 64.8 67.0 64.5 63.2 65.2 60.0 69.2 66.2	13.3 12.3 12.1 12.1 12.6 12.0 10.9 12.7 12.9 12.0
9-34	1.41 1.30 1.14 1.45 1.20 1.37 1.34 1.42 1.43	88.5 86.0 84.5 87.5 89.5 85.0 84.5 88.0 85.5	37.5 41.5 42.0 41.0 33.5 41.0 36.5 36.5 40.5	64.0 64.8 65.8 64.8 67.0 64.5 63.2 65.2 60.0	13.3 12.3 12.1 12.1 12.6 12.0 10.9 12.7 12.9

Table 180. Pima test: Seed data for Fabens, Tex.

0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
22 2	3 52	n 91	1 7	11.5
				12.5
				12.0
				12.0
				12.0
				12.0
				11.5
				12.0
				12.0
				11.5
				11.5
				12.0
				12.0
21.8	3.61	•/3	2.4	12.0
Seed	Seed	Seed	Floaters	Acid-
volume	surface	density	(percent)	delinted-
(mm <sup>3</sup> )	area (mm <sup>2</sup> )	(g/cm <sup>3</sup> )		seed index
100 0	12/ 2	0.076	1 0	10.0
				12.2
				12.8
12/.8	133.1	•953	• 5	12.7
127.3	132.8	•964	1.5	12.3
127.3 130.9	132.8 135.3	.964 .937	2.3	12.3
127.3 130.9 129.5	132.8 135.3 134.3	.964 .937 .898	2.3 1.8	12.3 11.6
127.3 130.9 129.5 119.9	132.8 135.3 134.3 127.6	.964 .937 .898 .920	2.3 1.8 2.0	12.3 11.6 11.0
127.3 130.9 129.5 119.9 130.5	132.8 135.3 134.3 127.6 135.0	.964 .937 .898 .920	2.3 1.8 2.0 1.0	12.3 11.6
127.3 130.9 129.5 119.9 130.5 136.5	132.8 135.3 134.3 127.6	.964 .937 .898 .920 .965	2.3 1.8 2.0	12.3 11.6 11.0
127.3 130.9 129.5 119.9 130.5	132.8 135.3 134.3 127.6 135.0	.964 .937 .898 .920	2.3 1.8 2.0 1.0	12.3 11.6 11.0 12.6
127.3 130.9 129.5 119.9 130.5 136.5	132.8 135.3 134.3 127.6 135.0 139.1	.964 .937 .898 .920 .965	2.3 1.8 2.0 1.0 2.8	12.3 11.6 11.0 12.6 12.5
127.3 130.9 129.5 119.9 130.5 136.5	132.8 135.3 134.3 127.6 135.0 139.1 129.2	.964 .937 .898 .920 .965 .913	2.3 1.8 2.0 1.0 2.8 4.5	12.3 11.6 11.0 12.6 12.5 11.3
127.3 130.9 129.5 119.9 130.5 136.5 122.2 136.2	132.8 135.3 134.3 127.6 135.0 139.1 129.2 138.9	.964 .937 .898 .920 .965 .913 .927	2.3 1.8 2.0 1.0 2.8 4.5 3.8	12.3 11.6 11.0 12.6 12.5 11.3
	(percent)  22.2 21.7 24.0 22.8 21.9 22.6 20.2 23.4 22.6 20.9 22.8 20.7 23.0 21.8  Seed volume	(percent) (percent)  22.2	(percent)       (percent)       gossypol (percent)         22.2       3.52       0.91         21.7       3.80       .67         24.0       3.57       1.09         22.8       3.52       1.01         21.9       3.58       .90         22.6       3.59       .82         20.2       3.76       .83         23.4       3.60       1.10         22.6       3.43       .86         20.9       3.69       .90         22.8       3.50       .78         20.7       3.72       .70         23.0       3.57       .89         21.8       3.61       .73         Seed       Seed       Seed         volume       surface       density         (mm³)       area (mm²)       (g/cm³)         129.3       134.2       0.946         137.3       139.6       .931	(percent)     (percent)     gossypol (percent)       22.2     3.52     0.91     1.7       21.7     3.80     .67     .5       24.0     3.57     1.09     2.2       22.8     3.52     1.01     3.2       21.9     3.58     .90     1.0       22.6     3.59     .82     1.1       20.2     3.76     .83     1.3       23.4     3.60     1.10     1.6       22.6     3.43     .86     1.3       20.9     3.69     .90     2.1       22.8     3.50     .78     3.0       20.7     3.72     .70     1.8       23.0     3.57     .89     3.5       21.8     3.61     .73     2.4       Seed     Seed     Floaters       volume     surface     density     (percent)       (mm³)     area (mm²)     (g/cm³)    129.3  134.2  0.946  1.8  137.3  139.6  0.931  3.0

Table 181. Pima test: Yield, boll and yarn tenacity data for Marana, Ariz. (Clark farm)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-45	1068 a	3.46	34.7	12.1	212
P-34	1065 a	4.03	37.9	14.1	212
P-48	1045 ab	3.97	36.3	14.4	213
P-42	1037 ab	4.19	35.8	13.8	198
P-43	949 abc	4.22	34.4	15.2	209
P-44	948 abc	3.71	34.2	12.8	203
P-47	914 abc	4.15	34.0	14.1	210
Pima S-5	902 bc	4.15	35.5	14.3	198
P-46	810 cd	3.74	33.2	14.0	207
E-15	710 d	3.97	34.7	13.4	199
E-16	669 de	3.90	34.4	13.5	202
P-50	564 e	4.08	31.8	14.6	194
P-49	564 e	4.24	33.1	14.9	191
E-14	530 e	3.95	33.5	14.6	190

Table 182. Pima test: Fiber data for Marana, Ariz. (Clark farm)

Variety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
P-45	1.48	0.73	311	6.8	4.50
2–34	1.43	.74	298	7.0	4.85
2–48	1.48	.76	297	7.2	4.35
2-42	1.51	.77	265	7.7	4.60
2-43	1.44	.72	296	8.1	4.85
2-44	1.44	.72	264	6.8	4.60
2-47	1.46	.74	293	7.0	4.80
Pima S-5	1.46	.74	268	7.8	4.50
2-46	1.48	.76	283	6.8	3.95
E-15	1.44	.70	266	6.7	4.30
E-16	1.47	.72	276	6.8	4.40
2-50	1.48	.70	272	7.3	4.60
2–49	1.43	.70	278	7.0	4.80
E-14	1.46	.70	264	7.2	4.85
		· · · ·	_ • •	,	
		h Volume Instru	ment	Colo	rimeter
	UHM	Uniformity	Tenacity	$R_d$	Hunter's
	(inches)	(percent)	(g/tex)		b value
P-45	1.42	86.5	37.5	61.5	11.5
2–45 2–34	1.42 1.28	86.5 86.0	37.5 40.0	61.5 64.0	11.5 12.8
2-34					
2-34	1.28	86.0	40.0	64.0	12.8
?-34 ?-48 ?-42	1.28 1.34	86.0 86.0	40.0 36.5	64.0 68.8	12.8 11.4
2-34 2-48 2-42 2-43	1.28 1.34 .90	86.0 86.0 83.5	40.0 36.5 37.0	64.0 68.8 64.8	12.8 11.4 11.8
2-34 2-48 2-42 2-43 2-44	1.28 1.34 .90 1.18	86.0 86.0 83.5 86.5	40.0 36.5 37.0 36.5	64.0 68.8 64.8 63.5	12.8 11.4 11.8 12.0
2-34 2-48 2-42 2-43 2-44	1.28 1.34 .90 1.18 1.30	86.0 86.0 83.5 86.5 86.0	40.0 36.5 37.0 36.5 37.5	64.0 68.8 64.8 63.5 65.2	12.8 11.4 11.8 12.0 11.5
2-34 2-48 2-42 2-43 2-44 2-47 2-ima S-5	1.28 1.34 .90 1.18 1.30 1.26	86.0 86.0 83.5 86.5 86.0 87.0	40.0 36.5 37.0 36.5 37.5 41.0	64.0 68.8 64.8 63.5 65.2 63.0	12.8 11.4 11.8 12.0 11.5
2-34 2-48 2-42 2-43 2-44 2-47 2-47 2-46	1.28 1.34 .90 1.18 1.30 1.26 1.04	86.0 86.0 83.5 86.5 86.0 87.0	40.0 36.5 37.0 36.5 37.5 41.0	64.0 68.8 64.8 63.5 65.2 63.0 67.0	12.8 11.4 11.8 12.0 11.5 12.0
P-34 P-48 P-42	1.28 1.34 .90 1.18 1.30 1.26 1.04 1.22 1.49	86.0 86.0 83.5 86.5 86.0 87.0 82.5 75.0	40.0 36.5 37.0 36.5 37.5 41.0 37.5 42.0	64.0 68.8 64.8 63.5 65.2 63.0 67.0 64.8	12.8 11.4 11.8 12.0 11.5 12.0 12.0 11.7
P-34 P-48 P-42 P-43 P-44 P-47 Pima S-5 P-46 E-15	1.28 1.34 .90 1.18 1.30 1.26 1.04 1.22	86.0 86.0 83.5 86.5 86.0 87.0 82.5 75.0 86.5	40.0 36.5 37.0 36.5 37.5 41.0 37.5 42.0 34.5 38.0	64.0 68.8 64.8 63.5 65.2 63.0 67.0 64.8 61.5	12.8 11.4 11.8 12.0 11.5 12.0 12.0 11.7 12.3
2-34 2-48 2-42 2-43 2-44 2-47 2-47 2-46 2-15	1.28 1.34 .90 1.18 1.30 1.26 1.04 1.22 1.49	86.0 86.0 83.5 86.5 86.0 87.0 82.5 75.0	40.0 36.5 37.0 36.5 37.5 41.0 37.5 42.0 34.5	64.0 68.8 64.8 63.5 65.2 63.0 67.0 64.8	12.8 11.4 11.8 12.0 11.5 12.0 12.0 11.7

Table 183. Pima test: Seed data for Marana, Ariz. (Clark farm)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-45	23.4	3.40	1.06	1.4	12.0
P-34	23.3	3.05	.84	1.0	12.5
P-48	22.1	3.70	.70	•7	11.5
P-42	24.0	3.38	•97	2.3	12.0
P-43	24.5	3.63	1.05	2.5	12.0
	22.9	3.62	1.18	1.7	11.5
P-44 P-47	23.2	3.55	1.05	1.1	12.0
Pima S-5	24.6	3.49	•95	1.6	12.5
P-46	23.9	3.54	.94	1.0	12.5
E-15	23.6	3.70	1.05	1.3	12.0
E-16	23.9	3.64	1.10	1.0	12.0
P-50	23.4	3.76	.92	1.5	12.0
P-49	22.6	3.64	.99	1.0	12.0
E-14	23.4	3.69	.99	1.3	12.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
D / F	120.0	120 2	1 020	1 2	12 /
P-45	120.9	128.3	1.029	1.3	12.4
P-34	132.9	136.7	1.047	3.3	13.9
P-48	139.2	141.0	1.031	3.0	14.1
P-42	129.6	134.4	1.037	2.8	13.4
P-43	139.0	140.8	1.061	1.5	14.7
P-44	126.7	132.4	1.061	2.3	12.9
P-47	137.4	139.7	1.040	2.0	14.3
Pima S-5	134.5	137.8	1.041	2.3	14.0
P-46	132.2	136.2	1.054	2.5	13.9
E-15	124.2	130.6	1.072	1.5	13.3
E-16	126.0	131.9	1.066	.8	13.4
P-50	131.2	135.5	1.081	1.3	14.2
P-49	142.0	142.9	1.029	1.3	14.6
E-14	134.4	137.7	1.070	•8	14.4

Table 184. Pima test: Yield, boll and yarn tenacity data for Safford, Ariz. (Layton farm)

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
D / F	987 a	3.29	37.5	11.3	212
P-45	838 b	3.68	37.7	12.5	214
P-47	829 bc	3.56	36.0	12.5	196
P-50					
E-16	827 bcd	3.50	37.5	12.1	205
E-15	813 bcd	3.78	37.8	12.2	204
P-44	812 bcd	3.11	36.7	11.8	200
P-34	804 bcd	3.42	40.4	13.0	206
P-49	786 bcd	3.53	36.6	12.9	190
P-43	767 bcd	3.67	37.0	13.1	206
E-14	737 cde	3.78	36.1	13.0	192
Pima S-5	732 de	3.72	38.6	12.2	196
P-48	732 de	3.42	39.5	12.8	210
P-46	673 e	3.23	35.9	12.4	201
P-42	658 e	3.35	39.0	11.4	201

Table 185. Pima test: Fiber data for Safford, Ariz. (Layton farm)

ocation	Digital F	ibrograph		meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
<b>-</b> 45	1.45	0.72	307	6.7	4.50
-47	1.42	.71	309	6.3	4.80
-50	1.42	.70	293	7.4	4.20
-16	1.44	.72	286	7.0	4.05
-15	1.40	.70	292	6.8	4.10
-44	1.42	•68	280	6.7	4.40
-34	1.40	.70	292	7.0	4.85
-49	1.44	.70	284	7.4	4.40
-43	1.40	.71	294	7.2	4.55
-14	1.44	•69	290	7.2	4.50
.ma S-5	1.42	.70	286	7.6	4.45
48	1.44	.72	292	7.2	4.30
•46	1.47	.70	293	6.4	4.40
·42	1.44	.70	274	7.0	4.30
		h Volume Instru			rimeter Hunter's
	Hig UHM (inches)		Tenacity (g/tex)	Color R <sub>d</sub>	rimeter Hunter's b value
	UHM	h Volume Instru Uniformity	Tenacity		Hunter's
45	UHM (inches)	h Volume Instru Uniformity (percent)	Tenacity (g/tex)	Rd	Hunter's b value
45	UHM (inches)	h Volume Instru Uniformity (percent)	Tenacity (g/tex) 44.5	65.2	Hunter's b value
45	UHM (inches)  1.35 1.36	h Volume Instru Uniformity (percent) 85.5 87.5	Tenacity (g/tex) 44.5 43.0	65.2 67.2	Hunter's b value  12.3 12.5
·45 · · · · · · · · · · · · · · · · · ·	UHM (inches)  1.35 1.36 1.36	h Volume Instru Uniformity (percent) 85.5 87.5 85.5	Tenacity (g/tex) 44.5 43.0 43.5	65.2 67.2 67.5	Hunter's b value  12.3 12.5 12.3
45	UHM (inches)  1.35 1.36 1.36 1.05	h Volume Instru Uniformity (percent) 85.5 87.5 85.5	Tenacity (g/tex) 44.5 43.0 43.5 44.0	65.2 67.2 67.5 67.5	Hunter's b value  12.3 12.5 12.3 12.8
45	UHM (inches)  1.35 1.36 1.36 1.05 1.35	h Volume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0	65.2 67.2 67.5 67.5	Hunter's b value  12.3 12.5 12.3 12.8 11.1
45	UHM (inches)  1.35 1.36 1.36 1.05 1.35 1.42	h Volume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0 84.5	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0 42.0	65.2 67.2 67.5 67.5 62.8 68.0	Hunter's b value  12.3 12.5 12.3 12.8 11.1 12.6
·45 · · · · · · · · · · · · · · · · · ·	UHM (inches)  1.35 1.36 1.36 1.05 1.35 1.42 1.26	h Volume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0 84.5 87.0	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0 42.0 42.5	65.2 67.2 67.5 67.5 62.8 68.0 51.8	Hunter's b value  12.3 12.5 12.3 12.8 11.1 12.6 13.5
-45	UHM (inches)  1.35 1.36 1.36 1.05 1.35 1.42 1.26 1.24 1.26	Nolume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0 84.5 87.0 87.0	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0 42.0 42.5 39.0 40.5	65.2 67.2 67.5 67.5 62.8 68.0 51.8 63.5 65.0	Hunter's b value  12.3 12.5 12.3 12.8 11.1 12.6 13.5 12.8 12.5
-45	UHM (inches)  1.35 1.36 1.36 1.05 1.35 1.42 1.26 1.24 1.26 1.40	Nolume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0 84.5 87.0 87.0 87.5	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0 42.0 42.5 39.0 40.5 41.5	65.2 67.2 67.5 67.5 62.8 68.0 51.8 63.5 65.0 64.8	Hunter's b value  12.3 12.5 12.3 12.8 11.1 12.6 13.5 12.8 12.5 12.4
-45	UHM (inches)  1.35 1.36 1.36 1.05 1.35 1.42 1.26 1.24 1.26 1.40 1.26	Nolume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0 84.5 87.0 87.0 87.5 84.0	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0 42.0 42.5 39.0 40.5 41.5	65.2 67.2 67.5 67.5 62.8 68.0 51.8 63.5 65.0 64.8 67.0	Hunter's b value  12.3 12.5 12.3 12.8 11.1 12.6 13.5 12.8 12.5 12.8 12.5
-45	UHM (inches)  1.35 1.36 1.36 1.05 1.35 1.42 1.26 1.24 1.26 1.40	Nolume Instru Uniformity (percent) 85.5 87.5 85.5 85.0 88.0 84.5 87.0 87.0 87.5	Tenacity (g/tex) 44.5 43.0 43.5 44.0 38.0 42.0 42.5 39.0 40.5 41.5	65.2 67.2 67.5 67.5 62.8 68.0 51.8 63.5 65.0 64.8	Hunter's b value  12.3 12.5 12.3 12.8 11.1 12.6 13.5 12.8 12.5 12.4

Table 186. Pima test: Seed data for Safford, Ariz. (Layton farm)

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-45	23.8	3.11	0.90	1.9	11.5
P-47	22.6	3.16	.74	1.2	12.0
P-50	23.2	3.20	.67	2.7	12.0
E-16	23.3	3.33	•95	2.1	12.0
E-15	22.9	3.42	.83	1.5	12.0
P-44	22.2	3.21	•92	2.3	11.0
	22.3	3.42	.76	•5	13.0
P-34	22.0	3.33	.82	2.5	12.0
P-49					
P-43	24.2	3.22	•90	2.3	11.0
E-14	23.3	3.36	.84	2.9	11.5
Pima S-5	23.5	3.32	.97	.7	12.0
P-48	21.1	3.41	•51	1.4	12.0
P-46	23.2	3.29	.75	.9	12.0
P-42	22.3	3.27	.78	1.9	12.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm <sup>2</sup> )	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
P-45	128.7	133.8	0.883	1.3	11.4
P-47	132.5	136.4	.941	2.5	12.5
	129.2	134.2	.962	3.0	12.4
			.943	2.0	
E-16	129.8	134.6			12.2
E-15	130.0	134.7	.946	2.0	12.3
P-44	124.0	130.4	.936	4.5	11.6
P-34	137.1	139.5	.944	6.8	12.9
P-49	153.1	150.1	.931	1.3	12.9
P-43	144.0	144.2	.913	2.3	12.9
E-14	135.5	138.4	.961	1.0	13.0
Pima S-5	132.4	136.3	.930	3.0	12.3
P-48	137.5	139.8	.920	6.3	12.7
P-46	136.5	139.2	.915	4.3	12.5
	122.6	129.5	.928	5.8	11.4

Table 187. Pima test: Yield, boll and yarn tenacity data for Coolidge, Ariz.

Variety	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Yarn tenacity (mN/tex)
P-34	973 a	2.97	38.0	12.4	212
P-43	938 ab	3.30	33.0	13.1	207
P-45	886 ab	2.87	35.4	11.0	216
P-48	880 ab	3.01	37.5	12.1	221
P-46	855 ab	2.86	34.1	11.9	216
P-44	844 ab	2.99	33.5	11.7	200
P-47	843 ab	3.04	34.7	12.3	210
Pima S-5	812 ab	3.28	36.8	12.3	208
P-42	807 ab	2.99	36.4	11.6	204
E-15	798 ab	3.08	35.0	11.9	204
E-16	766 abc	3.10	35.0	12.0	203
P-49	689 abc	3.16	34.0	12.4	197
E-14	666 bc	3.04	33.5	12.7	198
P-50	524 c	2.87	32.8	12.4	206

Table 188. Pima test: Fiber data for Coolidge, Ariz.

ariety	Digital F	ibrograph	Stelo	meter	Micronaire
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading
-34	1.40	0.70	324	7.3	4.20
-43	1.43	.70	300	7.2	4.25
-45	1.44	.70	312	6.8	4.40
-48	1.42	.70	286	7.5	3.80
-46	1.46	.72	305	7.3	3.85
-44	1.42	.68	292	7.0	4.05
	1.44	.72	315	7.0	
<b>-47</b>					4.05
ima S-5	1.42	•68	292	8.0	4.35
-42	1.44	.70	276	7.6	4.20
-15	1.44	.69	282	7.0	3.90
-16	1.44	.69	294	6.4	3.95
-49	1.43	.70	296	7.8	4.25
-14	1.42	•65	272	7.6	4.30
-50	1.42	.68	298	7.7	4.00
	II d al	h Volume Instru	ment	Color	rimeter
	HIG	h Volume Instru		00101	Imctel
	UHM	Uniformity	Tenacity	$\frac{R_d}{R_d}$	Hunter's
-3/	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	$R_d$	Hunter's b value
-34	UHM (inches)	Uniformity (percent)	Tenacity (g/tex)	R <sub>d</sub> 64.8	Hunter's b value
-43	UHM (inches)  1.34 1.37	Uniformity (percent)  86.0 87.5	Tenacity (g/tex) 41.5 39.5	64.8 66.2	Hunter's b value  12.6 11.9
-43 -45	UHM (inches)  1.34 1.37 1.20	Uniformity (percent) 86.0 87.5 84.0	Tenacity (g/tex) 41.5 39.5 39.0	64.8 66.2 65.5	Hunter's b value  12.6 11.9 11.5
-43 -45 -48	UHM (inches)  1.34 1.37 1.20 1.44	Uniformity (percent) 86.0 87.5 84.0 84.0	Tenacity (g/tex) 41.5 39.5 39.0 36.5	64.8 66.2 65.5 65.5	Hunter's b value  12.6 11.9 11.5 12.2
-43	1.34 1.37 1.20 1.44 1.36	Uniformity (percent) 86.0 87.5 84.0 84.0	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0	64.8 66.2 65.5 65.5 66.2	Hunter's b value  12.6 11.9 11.5 12.2 12.3
-43	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5	64.8 66.2 65.5 65.5 66.2 66.0	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8
-43 -45 -48 -46 -44	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0	64.8 66.2 65.5 65.5 66.2 66.0 66.2	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5
-43	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34 1.43	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5 86.0	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0 43.0	64.8 66.2 65.5 65.5 66.2 66.0 66.2 67.2	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5 11.4
-43 -45 -48 -46 -44 -47 -ima S-5 -42	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5 86.0 82.5	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0 43.0 41.5	64.8 66.2 65.5 65.5 66.2 66.0 66.2 67.2 65.0	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5
-43	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34 1.43	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5 86.0	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0 43.0	64.8 66.2 65.5 65.5 66.2 66.0 66.2 67.2	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5 11.4
-43 -45 -48 -46 -44 -47 -ima S-5 -42	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34 1.43 1.34	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5 86.0 82.5	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0 43.0 41.5	64.8 66.2 65.5 65.5 66.2 66.0 66.2 67.2 65.0	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5 11.4 12.8
-43	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34 1.43 1.34 1.34	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5 86.0 82.5 86.5	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0 43.0 41.5 40.0	64.8 66.2 65.5 65.5 66.2 66.0 66.2 67.2 65.0 63.8	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5 11.4 12.8 13.0
-43 -45 -48 -46 -44 -47 -ima S-5 -42 -15	UHM (inches)  1.34 1.37 1.20 1.44 1.36 1.18 1.34 1.43 1.34 1.34 1.34	Uniformity (percent) 86.0 87.5 84.0 84.0 85.0 83.5 84.5 86.0 82.5 86.5	Tenacity (g/tex) 41.5 39.5 39.0 36.5 44.0 39.5 47.0 43.0 41.5 40.0 38.5	64.8 66.2 65.5 65.5 66.2 66.0 66.2 67.2 65.0 63.8 64.0	Hunter's b value  12.6 11.9 11.5 12.2 12.3 12.8 11.5 11.4 12.8 13.0 12.4

Table 189. Pima test: Seed data for Coolidge, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	21.1	3.38	0.76	3.1	12.0
P-43	24.0	3.40	.85	4.3	11.0
P-45	22.2	3.34	.94	3.1	11.0
P-48	20.5	3.45	.70	3.5	11.5
P-46	20.9	3.34	.70 .72	3.3	12.0
P-44	21.1	3.50	.91	5.6	11.0
P-47	20.9	3.42	.76	4.5	12.0
	22.5	3.47	.79	2.3	12.0
Pima S-5					
P-42	20.4	3.36	.68	5.7	11.0
E-15	22.0	3.45	.90	2.4	11.5
E-16	22.3	3.32	.94	3.3	11.5
P-49	22.1	3.33	.87	4.5	11.5
E-14	22.5	3.44	.76	3.8	11.5
P-50	21.2	3.62	.79	3.8	12.0
	Cood	Cood	Cood	Electors	A o d d
	Seed volume (mm <sup>3</sup> )	Seed surface area (mm <sup>2</sup> )	Seed density (g/cm <sup>3</sup> )	Floaters (percent)	Acid- delinted- seed index
P-34	118.5	126.6	1.039	2.3	12.3
	118.5	126.6	1.069	1.3	12.7
	106.8	118.1	1.032	2.5	11.0
	116.7	125.4	1.032	9.5	11.8
				4.3	11.8
	115.3 109.6	124.4 120.2	1.019 1.048	4.0	11.5
P-44				3.0	
P-47	111.5	121.6	1.044		11.6
Pima S-5	117.6	126.0	1.034	5.8	12.2
2 /0	111.6	121.7	1.028	5.8	11.5
P-42		100 0	1 05/		
E-15	113.8	123.2	1.054	1.3	11.8
E-15 E-16	113.8 127.4	132.6	1.039	4.5	13.3
E-15 E-16 P-49	113.8 127.4 118.2	132.6 126.4	1.039 1.043	4.5 2.0	13.3 12.3
E-15 E-16	113.8 127.4	132.6	1.039	4.5	13.3

Table 190. Pima test: Yield, boll and yarn tenacity data for El Paso, Tex.

Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	tenacity (mN/tex)
750	2 00	27.0	10.7	100
				180
750 a	3.53			198
736 a	3.70	35.7	12.6	190
723 ab	3.54	37.0	12.5	206
713 ab	3.51	37.5	12.5	199
700 ab	3.65	39.9	13.0	204
691 abc	3.53	37.3	12.8	197
690 abc	3.76	37.0	12.8	195
681 abc	3.75	39.0	12.4	190
671 abc	3.35	36.8	11.7	192
628 bcd	3.26	36.9	12.0	209
600 dc	3.75	36.5	13.2	186
580 d	3.12	35.9	12.6	208
543 d	3.47	38.4	12.1	192
	752 a 750 a 736 a 723 ab 713 ab 700 ab 691 abc 690 abc 681 abc 671 abc 628 bcd 600 dc 580 d	752 a 3.82 750 a 3.53 736 a 3.70 723 ab 3.54 713 ab 3.51 700 ab 3.65 691 abc 3.53 690 abc 3.76 681 abc 3.75 671 abc 3.35 628 bcd 3.26 600 dc 3.75 580 d 3.12	752 a 3.82 37.3 750 a 3.53 40.6 736 a 3.70 35.7 723 ab 3.54 37.0 713 ab 3.51 37.5 700 ab 3.65 39.9 691 abc 3.53 37.3 690 abc 3.76 37.0 681 abc 3.75 39.0 671 abc 3.35 36.8 628 bcd 3.26 36.9 600 dc 3.75 36.5 580 d 3.12 35.9	752 a 3.82 37.3 12.7 750 a 3.53 40.6 13.2 736 a 3.70 35.7 12.6 723 ab 3.54 37.0 12.5 713 ab 3.51 37.5 12.5 700 ab 3.65 39.9 13.0 691 abc 3.53 37.3 12.8 690 abc 3.76 37.0 12.8 681 abc 3.75 39.0 12.4 671 abc 3.35 36.8 11.7 628 bcd 3.26 36.9 12.0 600 dc 3.75 36.5 13.2 580 d 3.12 35.9 12.6

Table 191. Pima test: Fiber data for El Paso, Tex.

Variety	Digital Fibrograph		Stelometer		Micronaire		
	2.5% S.L. (inches)	50% S.L. (inches)	T <sub>1</sub> (mN/tex)	E <sub>1</sub> (percent)	reading		
P-49	1.46	0.72	274	7.8	4.50		
9-34	1.37	•66	284	8.0	4.70		
<b>-</b> 50	1.42	.70	291	8.0	4.35		
-16	1.44	.70	305	6.9	4.05		
-47	1.40	.70	317	7.2	4.85		
-48	1.44	.69	282	7.4	4.15		
-43	1.44	.70	282	7.6	4.50		
<b>-</b> 15	1.44	.70	281	7.0	4.30		
ima S-5	1.41	.70	290	7.2	4.35		
-44	1.40	•67	261	7.2	4.30		
-45	1.46	•74	306	7.7	4.50		
-14	1.45	.70	278	7.8	4.50		
-46	1.43	.72	288	6.9	4.55		
-42	1.50	.74	284	8.2	4.15		
		High Volume Instrument			Colorimeter		
	UHM	Uniformity	Tenacity	$R_{d}$	Hunter's		
	(inches)	(percent)	(g/tex)		b value		
–49	1.35	82.5	41.0	63.8	12.3		
-34	1.37	86.0	43.0	61.5	12.3		
-50	1.34	86.0	42.5	65.8	12.3		
-16	1.18	86.5	38.5	65.8	12.5		
-47	1.35	87.5	36.0	64.5	12.1		
-48	1.44	87.5	34.5	66.0	11.6		
-43	1.26	84.5	35.0	63.5	12.4		
-15	1.42	84.5	38.5	63.5	12.6		
lma S-5	1.40	83.5	37.0	61.8	12.2		
-44	1.39	84.5	35.5	66.8	12.0		
-45	1.38	86.0	45.5	68.0	12.1		
-14	1.19	86.0	43.0	64.0	12.7		
-46	1.38	85.5	35.0	67.8	12.5		
40	1.30	03.3					
-42	.92	85.5	44.0	68.5	11.8		

Table 192. Pima test: Seed data for El Paso, Tex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-49	22.3	3.38	0.98	1.2	12.0
P-34	21.5	3.47	.73	.8	13.0
P-50	23.2	3.50	.98	1.1	12.0
E-16	22.7	3.63	1.03	1.4	12.0
P-47	21.7	3.59	•57	1.5	12.0
2–48	20.6	3.27	.72	1.5	12.0
2–43	23.0	3.49	•90	1.8	11.0
E-15	23.3	3.35	.95	•9	12.0
ima S-5	22.9	3.51	.82	.8	12.0
2-44	21.7	3.72	.92	2.2	11.5
2–45	21.4	3.44	1.07	1.8	12.0
2-14	23.0	3.41	1.04	1.6	12.0
2–46	21.4	3.41	.99	1.5	12.0
2-42	21.5	3.45	.76	2.1	12.0
72	21.5	3.43	• 7 0	2 • 1	12.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm <sup>3</sup> )	surface area (mm²)	density (g/cm <sup>3</sup> )	(percent)	delinted- seed index
n 40					
P-49	141.5	142.2	0.922	2.3	13.0
	141.5 144.4	142.2 144.4	0.922 .931	2.3	13.0 13.4
-34					
<b>9–34</b>	144.4	144.4	.931	2.0	13.4
-34	144.4 136.2	144.4 139.0	.931 .941	2.0 1.8	13.4 12.8
-34	144.4 136.2 131.9	144.4 139.0 136.0	.931 .941 .952	2.0 1.8 3.8 3.3	13.4 12.8 12.5
2–34 2–50 3–16 3–47 3–48	144.4 136.2 131.9 133.7	144.4 139.0 136.0 137.2	.931 .941 .952 .938	2.0 1.8 3.8	13.4 12.8 12.5 12.6
2-34 2-50 3-16 3-47 2-48	144.4 136.2 131.9 133.7 144.7	144.4 139.0 136.0 137.2 144.6	.931 .941 .952 .938	2.0 1.8 3.8 3.3 4.5	13.4 12.8 12.5 12.6 13.0
2-34 2-50 3-16 2-47 2-48 2-43	144.4 136.2 131.9 133.7 144.7	144.4 139.0 136.0 137.2 144.6 141.8	.931 .941 .952 .938 .901	2.0 1.8 3.8 3.3 4.5	13.4 12.8 12.5 12.6 13.0 13.2
2-34 2-50 3-16 3-47 2-48 3-43 3-15 2-ma S-5	144.4 136.2 131.9 133.7 144.7 140.4 136.0	144.4 139.0 136.0 137.2 144.6 141.8 138.8 139.7	.931 .941 .952 .938 .901 .938	2.0 1.8 3.8 3.3 4.5 1.1	13.4 12.8 12.5 12.6 13.0 13.2
2-34 2-50 3-16 3-47 2-48 2-43 3-15 2-ma S-5	144.4 136.2 131.9 133.7 144.7 140.4 136.0 137.4 124.9	144.4 139.0 136.0 137.2 144.6 141.8 138.8 139.7	.931 .941 .952 .938 .901 .938 .956 .903	2.0 1.8 3.8 3.3 4.5 1.1 1.5 3.8 4.8	13.4 12.8 12.5 12.6 13.0 13.2 13.0 12.4 11.6
2-34 2-50 3-16 3-47 3-48 3-43 3-15 2-43 3-15 2-44	144.4 136.2 131.9 133.7 144.7 140.4 136.0 137.4 124.9	144.4 139.0 136.0 137.2 144.6 141.8 138.8 139.7 131.1	.931 .941 .952 .938 .901 .938 .956 .903 .929	2.0 1.8 3.8 3.3 4.5 1.1 1.5 3.8 4.8 3.0	13.4 12.8 12.5 12.6 13.0 13.2 13.0 12.4 11.6 12.0
2-34 2-50 2-16	144.4 136.2 131.9 133.7 144.7 140.4 136.0 137.4 124.9	144.4 139.0 136.0 137.2 144.6 141.8 138.8 139.7	.931 .941 .952 .938 .901 .938 .956 .903	2.0 1.8 3.8 3.3 4.5 1.1 1.5 3.8 4.8	13.4 12.8 12.5 12.6 13.0 13.2 13.0 12.4 11.6

## COMBED-YARN TEST

Table 193. Combed-yarn test: Phoenix, Ariz.

Pima S-5	P-34	P-42	P-43	P-44
		6		7
48	48	48	48	48
				172
				146
125	125	115	130	120
				76
158	106	134	102	136
				14.6
15.4	15.3	15.5	16.6	17.0
D 45	D // C	D- 47	n 40	P-49
P=45	P=46	P=4/	P=48	P=49
6	7	o	7	7
				7
48	50	50	48	48
100	10.0	102	100	160
				169
				146
120	120	125	125	110
0.0		0.0		100
				100
112	124	128	124	234
				-0.0
				13.3
14.9	15•1	16.9	15.0	17.7
P-50	E-14	4	E-15	E-16
10	8		7	7
48	48	3	48	48
179	164	4	176	188
	14:	2	150	165
	105	5	115	100
62	90	6	162	88
94			238	278
18.4	15.4	4	13.0	13.4
17.5			17.8	17.3
	4 48 172 146 125 50 158 10.3 15.4  P-45  6 48 188 161 120 30 112 11.4 14.9  P-50  10 48  179 154 120 62 94 18.4	Pima S-5       P-34         4       6         48       48         172       181         146       154         125       125         50       70         158       106         10.3       12.8         15.4       15.3         P-45       P-46         6       7         48       50         188       188         161       161         120       120         30       62         112       124         11.4       13.0         14.9       15.1         P-50       E-14         10       8         48       48         179       164         154       14         120       10         62       96         94       314         18.4       15.4         18.4       15.4	4 6 6 6 48 48 48 48 48 48 48 48 48 48 48 48 48	Pima S-5         P-34         P-42         P-43           4         6         6         5           48         48         48         48           172         181         174         172           146         154         146         139           125         125         115         130           50         70         74         64           158         106         134         102           10.3         12.8         11.1         9.7           15.4         15.3         15.5         16.6           P-45         P-46         P-47         P-48           6         7         8         7           48         50         50         48           188         188         183         188           161         161         154         158           120         120         125         125           30         62         32         60           112         124         128         124           14.9         15.1         16.9         15.0           P-50         E-14         E-15

Table 194. Combed-yarn test: Safford, Ariz.

	Variety				
Test	Pima S-5	P-34	P-42	P-43	P-44
Classer's designation:					
Grade	5	5	6	4	5
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	167	172	176	164	162
7.4-tex, combed	142	150	146	136	139
Yarn appearance index	120	130	120	125	125
Yarn imperfections:					
11.8-tex, combed	32	32	48	24	46
7.4-tex, combed	90	88	110	70	140
Waste, percent:					
Picker and card	9.8	10.8	11.1	9.3	11.7
Comber	14.3	13.0	14.6	14.3	15.9
•	P-45	P-46	P-47	P-48	P-49
Classer's designation:		2 40		1 40	
Grade	6	5	7	5	4
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:	10	,,	.0	40	40
11.8-tex, combed	183	179	176	181	167
7.4-tex, combed	154	154	150	154	142
Yarn appearance index	125	115	120	120	125
Yarn imperfections:	123	113	120	120	123
11.8-tex, combed	42	56	30	72	48
7.4-tex, combed	110	124	68	140	106
Waste, percent:	110	124	00	140	100
Picker and card	11.8	11.6	14.5	10.0	10.2
Comber	14.7	15.1	13.8	15.0	14.8
Comper	14•/	13•1	13.0	13.0	14.0
	P-50	E-14		E-15	E-16
Classer's designation:					
Grade	6	5		5	5
Staple: 32's inch	48	48		46	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	179	167	•	179	183
7.4-tex, combed	154	135		146	158
Yarn appearance index	115	125		105	115
Yarn imperfections:					
11.8-tex, combed	18	36	)	64	108
7.4-tex, combed	84	112		176	222
Waste, percent:					
Picker and card	14.2	11.4		10.4	10.6
Comber	15.0	14.9		14.8	16.6

Table 195. Combed-yarn test: El Paso, Tex.

Market I was a series of		V	ariety		
Test	Pima S-5	P-34 P-42		P-43	P-44
Classer's designation:					
Grade	7	6	7	7	7
Staple: 32's inch	48	46	48	46	46
Yarn tenacity, cN/tex:					
11.8-tex, combed	174	169	172	162	169
7.4-tex, combed	146	146	142	139	135
Yarn appearance index	120	125	110	120	120
Yarn imperfections:					
11.8-tex, combed	24	30	64	40	38
7.4-tex, combed	88	78	174	60	92
Waste, percent:	00	, ,	-, .		22
Picker and card	12.8	11.3	14.5	11.4	15.0
Comber	14.9	14.2	15.4	14.6	15.1
Comper	14.7	14.2	13.4	14.0	13.1
	P-45	P-46	P-47	P-48	P-49
Classer's designation:					
Grade	7	7	7	7	6
Staple: 32's inch	48	48	48	48	48
Yarn tenacity, cN/tex:	40	40	40	40	40
11.8-tex, combed	181	179	172	176	167
	150	154	142	150	135
7.4-tex, combed					125
Yarn appearance index	115	120	120	115	123
Yarn imperfections:	F0	2/	10	20	00
11.8-tex, combed	50	34	40	38	28
7.4-tex, combed	128	100	64	98	106
Waste, percent:					
Picker and card	14.2	13.7	14.0	12.4	12.1
Comber	15.0	15.0	14.6	13.4	13.6
the state of the s	P-50	E-14		E-15	E-16
Classer's designation:					_
Grade	10	7		7	7
Staple: 32's inch	48	48		48	48
Yarn tenacity, cN/tex:					
11.8-tex, combed	172	162		179	181
7.4-tex, combed	146	131		150	154
Yarn appearance index	115	115		115	115
Yarn imperfections:					
11.8-tex, combed	54	76		44	46
7.4-tex, combed	102	126		136	150
Waste, percent:	102	120			
Picker and card	16.4	12.8		14.1	13.9
		15.1		16.0	16.0
Comber	14.7	10.1		10.0	10.0

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